CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, February 8, 19

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CONSTRUCTION NEWS.

PLANS AND SPECIFICATIONS ON FILE.

The following Plans (P.), Specifications (S.), and Bidding Sheets (B. S.) may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York:

Bids close.	Work.	Place.	On file.	See issue.
Feb.				
*8	Gas plant	Hattiesburg, Miss.	P. & S.	1-25
*8	Steel lock gates	Nashville, Tenn.	S. & B. S.	1-11
10	Fire alarm system	Norfolk, Va.	P. S. & B. S.	1-18
10	Steel caisson	Charleston, S. C.	S.	1-11
10	Pier	Portsmouth, N. H.	P. S. & B. S.	1-18
10	Reservoir, etc.	Sandy Hook, N. J.	P. & S.	1-18
*14	Bridges	Philadelphia, Pa.	P. S. & B. S.	1-18
*16	Sewers	Mohawk, N. Y.	S. & B. S.	1-25
16	Water sys.	Riverside Park, Va.	S.	1-25
19	Snag boats	Dallas, Tex.	P. & S.	1-18
*19	Water & light plant	Jackson, Mo.	S. & B. S.	1-25
*19	Viaduct	Atlanta, Ga.	P. & S.	1-25
*19	Purification plant	Ft. Assiniboine, Mont.	P. S. & B. S.	1-25
24	Sewer system	Lawrence, Ind.	S.	2- 1
24	Water system	Lawrence, Ind.	S.	2- 1
*28	Sluice gates, etc.	L Angeles, Cal.	P. S. & B. S.	1-25
Mar.				
*1	Pumping plant	Harlingen, Tex.	S.	2- 1
3	Blasting ledge	Portsmouth, N. H.	S.	2- 8
*5	Bridge	Boston, Mass.	S.	2- 8
*7	Sewer system	Gainesville, Fla.	S.	2- 8
*5	Elevator	Grand Rapids, Mich.	Data	1-18
*10	Two snagboats	Vicksburg, Miss.	P. & S.	1-11
*15	Canal	Oregon	P. & S.	2- 8
—	—Steel, etc.	Glendive, Mont.	P. & S.	2- 8
Apr.				
*2	Port works	Chile	P. & S.	5- 4
5	Wharves	Manila, P. I.	P. & S.	12-14

*Work advertised in Engineering News.

NOTE—We are desirous of securing specifications and bidding sheets (and plans when not too bulky) of pending work for file in our New York office for the benefit of contractors or others who may be interested in the work. If more sets than one are sent us we shall be pleased to distribute these to contractors who ask for them. When the work is advertised in Engineering News a note that the plans are filed with us will be added to the advertisement without cost.

LIST OF CONTRACTS PENDING.

Bids close.	Work.	Place.	On file.	See issue
	LIGHT, HEAT AND POWER PLANTS.			
Feb. 8	Gas plant, complete	Hattiesburg, Miss.		Jan. 25
	Advertised, Eng. News, Jan. 25 to Feb. 8.			
Feb. 12	Lighting plant	Afton, Ia.		Jan. 25
Feb. 14	Light & water plant	Wynnewood, Ind. T.		Feb. 1
Feb. 14	Electric light plant	Gunnison, Colo.		Jan. 25
Feb. 14	Gas and oil lighting	Easton, Pa.		Feb. 8
Feb. 15	Alternator, Etc.,	Picton, Ont.		Feb. 8
Feb. 17	Water-works system	Benson, Neb.		Feb. 8
Feb. 20	Lighting, Oil City	Pa.		Jan. 25
	Advertised, Eng. News, Jan. 25 to Feb. 8.			
Feb. 23	Generators, etc.,	Cincinnati, O.		Feb. 8
Feb. 24	Power plant, Lima	O.		Jan. 25
	Advertised, Eng. News, Jan. 25.			
Feb. 26	Generators, etc.,	Winnipeg, Man.		Jan. 18
Mar. 5	Electric lighting, Orange	N. J.		Feb. 8
	Advertised, Eng. News, Feb. 8 and 15.			
Apr. 4	Transmission line poles	Chicago, Ill.		Feb. 8
	Advertised, Eng. News, Feb. 8.			
No date.	Lighting plant, etc.,	Watonga, Okla.		Feb. 1
	BRIDGES.			
Feb. 12	Bridge	Delaware, O.		Jan. 25
Feb. 13	Bridges	Plattsmouth, Neb.		Feb. 1
Feb. 13	Bridge	Chattanooga, Tenn.		Feb. 1
	Advertised, Eng. News, Feb. 1.			
Feb. 14	Bridges	Philadelphia, Pa.		Jan. 18
	Advertised, Eng. News, Jan. 18 to Feb. 1.			
Feb. 19	Viaduct	Atlanta, Ga.		Jan. 25
	Advertised, Eng. News, Jan. 25 and Feb. 1.			
Feb. 19	Reflooring bridge	Minneapolis, Minn.		Feb. 1
Feb. 20	Bridges	Hailey, Idaho		Feb. 1
Feb. 20	Bridges	Wayne, Neb.		Jan. 25
Feb. 20	Bridge	Odessa, Del.		Feb. 8
	Advertised, Eng. News, Feb. 1.			
Mar. 5	Bridge	Boston, Mass.		Feb. 8
	Advertised, Eng. News, Feb. 8 and 15.			
Mar. 6	Bridge	New Rockford, N. Dak.		Feb. 8
Mar. 6	Bridge	Ft. Benton, Mont.		Feb. 8
Mar. 30	Bridge	Port Huron, Mich.		Feb. 1
Mar. 31	Bridge	Custer, S. Dak.		Jan. 25
	BUILDINGS.			
Feb. 8	Addition	New York, N. Y.		Feb. 1
Feb. 8	Court-house	New York, N. Y.		Jan. 25
Feb. 8	Building	Crawfordsville, Ind.		Jan. 25
Feb. 9	Building	Ames, Ia.		Jan. 4
Feb. 12	Heating & plumbing	Albany, N. Y.		Feb. 8
Feb. 12	Building	Norristown, Pa.		Feb. 1
Feb. 13	Concrete floors	Buffalo, N. Y.		Feb. 8
Feb. 13	Wiring	New York, N. Y.		Feb. 1
Feb. 13	Addition	New York, N. Y.		Feb. 1
Feb. 14	Armory	Spokane, Wash.		Feb. 1
Feb. 14	Elevators	Baltimore, Md.		Jan. 25
	Advertised, Eng. News, Jan. 25 and Feb. 1.			
Feb. 14	Gymnasium	Annapolis, Md.		Jan. 25
	Advertised, Eng. News, Jan. 25 and Feb. 1.			
Feb. 14	Building	New York, N. Y.		Feb. 1
Feb. 15	Boat-house	New York, N. Y.		Feb. 1
Feb. 16	Armory	Holyoke, Mass.		Jan. 18
Feb. 19	Wiring	New York, N. Y.		Feb. 8
Feb. 19	Addition	New York, N. Y.		Feb. 8
Feb. 20	Appliances	Buffalo, N. Y.		Feb. 8
Feb. 21	Convenience station	Wash., D. C.		Feb. 8
	Advertised, Eng. News, Feb. 8 and 15.			
Feb. 24	Building	Otoe, Okla.		Feb. 1
Feb. 24	Plumbing, etc.,	Ft. Sam Houston, Tex.		Feb. 1
Feb. 26	Granite	Washington, D. C.		Jan. 25
	Advertised, Eng. News, Jan. 25 to Feb. 15.			
Feb. 27	Hospital	Sheridan, Wyo.		Feb. 8
Feb. 28	Plumbing	Washington, D. C.		Feb. 1
	Advertised, Eng. News, Feb. 1 to 22.			
Feb. 28	Buildings	Philadelphia, Pa.		Feb. 1
	Advertised, Eng. News, Feb. 1 and 8.			
Feb. 28	Framing, etc.,	Washington, D. C.		Feb. 1
	Advertised, Eng. News, Feb. 1 to 22.			
Mar. 5	Elevator, Grand Rapids	Mich.		Jan. 18
	Advertised, Eng. News, Jan. 18 and 25.			
Mar. 15	Church	Zanesville, O.		Feb. 1
	WATER SUPPLY AND IRRIGATION.			
Feb. 10	Reservoir, etc.,	Sandy Hook, N. J.		Jan. 18
Feb. 12	Addition, w-works bldg.,	Rock Island, Ill.		Feb. 1
Feb. 12	Pipe	Lorain, O.		Feb. 8
Feb. 14	Water system	Gunnison, Colo.		Jan. 25
Feb. 15	Water-works, De Queen	Ark.		Jan. 4
	Advertised, Eng. News, Jan. 4.			
Feb. 16	Water system, Riverside Park	Va.		Jan. 25
Feb. 17	Water system	Benson, Neb.		Feb. 8
Feb. 19	Water and light plant	Jackson, Mo.		Jan. 25
	Advertised, Eng. News, Jan. 25 and Feb. 1.			
Feb. 19	Stand-pipe	Sherman, Tex.		Feb. 1
Feb. 24	Water system, etc.,	Lawrence, Ind.		Feb. 1
Feb. 26	Extension water main	Portland, Me.		Feb. 8
Mar. 1	Pumping plant	Harlingen, Tex.		Feb. 1
	Advertised, Eng. News, Feb. 1 and 8.			
Mar. 6	Water tank	Parkridge, Ill.		Feb. 1
	SEWERAGE.			
Feb. 8	Sewers	New York, N. Y.		Jan. 25
Feb. 8	Sewers	Cleveland, O.		Feb. 8
Feb. 10	Sewers	Tacoma, Wash.		Feb. 8
Feb. 10	Sewer, Jefferson Barracks, Mo.			Jan. 25
Feb. 10	Repairing sewers, Menands, N. Y.			Feb. 1
Feb. 12	Sewer	Berkeley, Cal.		Feb. 8
Feb. 13	Sewers	Cleveland, O.		Feb. 8
Feb. 13	Sewer system	Marion, Mass.		Feb. 8
Feb. 13	Sanitary sewer sys.,	Black Diamond, Cal.		Feb. 8
Feb. 13	Sewers	New York, N. Y.		Feb. 1
Feb. 15	Sewer	Emmetsburg, Ia.		Jan. 25
Feb. 15	Sewers	Cresco, Ia.		Jan. 25
Feb. 15	Storm sewer system	Dayton, O.		Jan. 4
Feb. 15	Tile sewers	Buffalo, N. Y.		Feb. 8
Feb. 15	Extension, sewer sys.,	St. Petersb'g, Fla.		Feb. 8
Feb. 15	Sewers	Galveston, Tex.		Feb. 8
Feb. 16	Sewer system	Sharon, Conn.		Feb. 8
Feb. 16	Sewers	Mohawk, N. Y.		Jan. 25
	Advertised, Eng. News, Jan. 25 and Feb. 1.			
Feb. 16	Box culvert	Cincinnati, O.		Feb. 1
Feb. 19	Purification plant	Ft Assinniboine, Mont.		Jan. 25
	Advertised, Eng. News, Jan. 25 to Feb. 15.			
Feb. 22	Sewer system	Lexington, N. C.		Feb. 1
	Advertised, Eng. News, Feb. 1 to 15.			
Feb. 24	Sewer system	Lawrence, Ind.		Feb. 1
Feb. 27	Sewer system, Cloverdale, Cal.			Feb. 1
Mar. 5	Sewers, drains	Jacksonville, Fla.		Feb. 1
Mar. 6	Sewer system	Toronto, Ont.		Feb. 1
	Advertised, Eng. News, Feb. 1 to 15.			
Mar. 7	Sewer system	Gainesville, Fla.		Feb. 8
	Advertised, Eng. News, Feb. 8 to Mar. 1.			
	STREETS AND ROADS.			
Feb. 8	Paving	New York, N. Y.		Jan. 25
Feb. 9	Gravel roads	Brazil, Ind.		Feb. 1
Feb. 9	Stone	Cincinnati, O.		Feb. 1
Feb. 10	Paving sidewalks	Roanoke, Va.		Jan. 18
	Advertised, Eng. News, Jan. 18.			
Feb. 12	Macadamizing	Delaware, O.		Feb. 1
Feb. 12	Brick paving	Oskaloosa, Ia.		Feb. 8
Feb. 13	Paving	Shreveport, La.		Feb. 8
Feb. 13	Brick paving	New York, N. Y.		Feb. 1
Feb. 13	Paving, Independence	Kan.		Jan. 18
	Advertised, Eng. News, Jan. 18.			
Feb. 14	Paving	Little Rock, Ark.		Jan. 18
Feb. 14	Paving	Houston, Tex.		Feb. 1
Feb. 14	Repairing asphalt pavem't	N. York, N. Y.		Feb. 8
Feb. 15	Repaving	Buffalo, N. Y.		Feb. 8
Feb. 15	Paving, Red Jacket	Mich.		Feb. 1
Feb. 15	Paving, Rhinelander	Wis.		Jan. 25
Feb. 19	Repaving, Great Falls	Mont.		Feb. 8
Feb. 23	Asphalt resurfacing, Minneapolis	Minn.		Feb. 1
Feb. 23	Paving materials, Minneapolis	Minn.		Feb. 1
Mar. 13	Asphalt paving, Crookston	Minn.		Feb. 8
Mar. 15	Road, Peekskill	N. Y.		Feb. 8
	Advertised, Eng. News, Feb. 8.			
Apr. 2	Road, Leavenworth	Wash.		Feb. 8
	MISCELLANEOUS CONTRACTS.			
Feb. 8	Riprap breakwaters, New York, N. Y.			Jan. 11
	Advertised, Eng. News, Jan. 11 to Feb. 1.			
Feb. 8	Steel lock gates, Nashville, Tenn.			Jan. 11
	Advertised, Eng. News, Jan. 11 to Feb. 1.			
Feb. 8	Drainage ditch, Sioux City, Ia.			Jan. 4
Feb. 9	Building, Spain (Foreign)			Jan. 18
Feb. 9	Cement, Minneapolis, Minn.			Feb. 1
Feb. 10	Pier, Portsmouth, N. H.			Jan. 18
Feb. 10	Fire alarm system, Norfolk, Va.			Jan. 18
Feb. 10	Breakwaters, etc., Egypt (Foreign)			Jan. 4
Feb. 10	Steel caisson, Charleston, S. C.			Jan. 11
Feb. 12	Garbage destructor, Santa Monica, Cal.			Feb. 8
Feb. 13	Steel tower, Shreveport, La.			Dec. 28
	Advertised, Eng. News, Dec. 28 to Feb. 8.			
Feb. 13	Creosoted cross-ties, Shreveport, La.			Feb. 8
Feb. 14	Iron gates, Winchester, Va.			Jan. 25
Feb. 15	Locks and dams, Dallas, Tex.			Jan. 4
	Advertised, Eng. News, Jan. 4 to 18 and Feb. 8.			
Feb. 15	Ry. excavation, C., C., C. & St. L. Ry.			Feb. 1
	Advertised, Eng. News, Feb. 1 and 8.			
Feb. 19	Miscell. supplies, Panama			Feb. 1
	Advertised, Eng. News, Feb. 1 and 8.			
Feb. 19	Wooden snagboats, Dallas, Tex.			Jan. 18
	Advertised, Eng. News, Jan. 18 to Feb. 8.			
Feb. 19	Canal, Worland, Wyo.			Feb. 8
Feb. 20	Ditch, Northwood, Ia.			Feb. 1
Feb. 23	Dredging, Galveston, Tex.			Jan. 25
	Advertised, Eng. News, Jan. 25 to Feb. 15.			
Feb. 23	Filling, Galveston, Tex.			Jan. 25
	Advertised, Eng. News, Jan. 25 to Feb. 15.			
Feb. 27	Hose wagon, Crookston, Minn.			Feb. 1
Feb. 28	Sluice gates, etc., Los Angeles, Cal.			Jan. 25
	Advertised, Eng. News, Jan. 25 to Feb. 8.			
Feb. 28	Cement, Washington, D. C.			Feb. 8
	Advertised, Eng. News, Feb. 8 to 22.			
Mar. 2	Dredging, Savannah, Ga.			Feb. 1
	Advertised, Eng. News, Feb. 1 to Mar. 1.			
Mar. 2	Repairing wall, Savannah, Ga.			Feb. 1
	Advertised, Eng. News, Feb. 1 to Mar. 1.			
Mar. 3	Blasting ledge, Portsmouth, N. H.			Feb. 8
Mar. 6	Dredging, Rock Island, Ill.			Feb. 8
Mar. 9	Cement, Nampa, Idaho			Feb. 8
	Advertised, Eng. News, Feb. 8 to Mar. 1.			
Mar. 10	Electric railway, Baltimore, Md.			Feb. 8
	Advertised, Eng. News, Feb. 8 to Mar. 1.			
Mar. 10	Two snagboats, Vicksburg, Miss.			Jan. 11
	Advertised, Eng. News, Jan. 11-18, Feb. 1-8.			
Mar. 13	Powder tanks, Washington, D. C.			Feb. 8
	Advertised, Eng. News, Feb. 8 and 15.			
Mar. 15	Canal, Oregon			Feb. 8
	Advertised, Eng. News, Feb. 8.			
Apr. 2	Port works, Chile (Foreign)			May 4
	Advertised, Eng. News, April 1, 1906.			
Apr. 3	Ditch, Spirit Lake, Ia.			Jan. 18
Apr. 5	Wharves, Manila, P. I.			Dec. 14
May 1	Steel dock, Chile (Foreign)			Nov. 9
No date.	Dyke, Lincoln, Neb.			Jan. 18
	Advertised, Eng. News, Jan. 18.			
No date.	Steam shovel excavation, Towanda, Pa.			Feb. 1
No date.	Cement, Chicago, Ill.			Feb. 1
No date.	Steel, cast-iron, etc., Glendive, Mont.			Feb. 8
	CIVIL SERVICE EXAMINATIONS.			
Feb. 13	Asst. Engineer, New York, N. Y.			Jan. 25
	Advertised, Eng. News, Jan. 25 and Feb. 1.			
Feb. 14	Machinist, Washington, D. C.			Jan. 25
Feb. 14	Engineman, Portland, Me.			Feb. 1
Feb. 15	Inspector Steel Cons., New York, N. Y.			Jan. 25
	Advertised, Eng. News, Jan. 25 and Feb. 1.			
Feb. 16	Transitman, Computer, New York, N. Y.			Jan. 25
	Advertised, Eng. News, Jan. 25 and Feb. 1.			
Feb. 17	Asst. Elec. Engr., Albany, N. Y.			Feb. 1
Feb. 17	C. E. Draftsman, Albany, N. Y.			Feb. 1
Feb. 17	Foreman Laborers, Albany, N. Y.			Feb. 1
Feb. 17	Asst. C. E., Albany, N. Y.			Feb. 1
Feb. 17	Arch. Designer, Albany, N. Y.			Feb. 1
Feb. 17	Arch. Draftsman, Albany, N. Y.			Feb. 1
Feb. 17	Leveler, Albany, N. Y.			Feb. 1
Feb. 20	Draftsman, Washington, D. C.			Feb. 1
Feb. 21	Rock Grinder (special), Wash., D. C.			Feb. 1
Feb. 21	Statistician, Washington, D. C.			Feb. 1
Feb. 21	Assayer, Ore Dresser, Washington, D. C.			Feb. 1
Feb. 27	Mech. Draftsman, New York, N. Y.			Feb. 8
	Advertised, Eng. News, Feb. 8 and 15.			
Mar. 14	Aid, Washington, D. C.			Feb. 8

TO ENGINEERS AND CONTRACTORS

ENGINEERING NEWS desires to obtain the **earliest possible reliable information** concerning all projected work. We will appreciate any items that you may send us. Copies containing such information will be mailed to you, upon request.

ADDRESS

Wainwright A. S. Randall, Editor,
The Construction News Department.

RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

ARKANSAS VALLEY R. R.—C. M. Ward, Ch. Engr., Lamar, Colo., informs us that McDONNELL & LEONARD, of Lamar, have been awarded the contract for building this railway. It will extend from Pueblo, Colo., easterly to Kansas state line, a distance of 200 miles. Surveys have been run and right-of-way and capital secured. E. C. Howe, of Denver, Colo., is Pres. The company was recently incorporated in Colorado, with $1,000,000 capital stock.

ALBUQUERQUE EASTERN.—According to a reported statement of W. S. Hopewell, Second Vice-Pres. and Gen. Mgr., Albuquerque, N. Mex., this road will be 45 miles long, from Moriarty to Albuquerque, N. Mex., with a branch 13 miles in length from Frost to Hagan. Grading has been completed from Moriarty west, 24 miles, and from Albuquerque east, 10 miles, but work is now temporarily suspended. All ties and bridge timber are on the ground. The road is being built by the PENNSYLVANIA DEVELOPMENT CO., of Santa Fe, N. Mex. It is to be a branch of the Santa Fe Central. Francis J. Torrance is Pres., Pittsburg, Pa.; J. R. Farwell, Ch. Engr., Albuquerque, N. Mex. Mr. Torrance is First Vice-Pres. of the Santa Fe Central Ry. and Mr. Hopewell is Second Vice-Pres.

ARKANSAS.—Col. C. Godman has submitted a proposition to the citizens of Dardanelle, Ark., to build a standard-gage line to Ola, a distance of 15 miles. Estimated cost of construction is placed at $150,000, of which Col. Godman stipulates that $80,000 must be raised by local subscription. Local press reports state that the project has been enthusiastically received and that the railway will be built. J. M. Nolen is Mayor of Dardanelle.

CHICAGO SOUTHERN. — The Chicago Clearing House committee has decided not to complete the Chicago Southern Railroad, which is the Chicago division of the Southern Indiana, according to a Chicago press report. The contract for the grading and concrete work only will be completed, and this within six weeks' time. Track-laying has been stopped. The Chicago committee finds that it can realize as advantageously by selling the road as it is, the purchasing company to complete it. J. W. Walsh is Vice-Pres. of the Southern Indiana Ry. Co., Grand Central Station, Chicago.

CANADIAN NORTHERN.—It is reported that this company will extend its branch from Swan River, on which work was begun last year, for some miles westward between the main line and the Prince Albert section. The work will be proceeded with this year. The line will pass through a very fertile country, lying between the Quill Plain and Carrot River districts. M. H. McLeod is Ch. Engr., at Winnipeg, Man.

CHICAGO, ROCK ISLAND & PACIFIC.—We are informed by J. G. Bloom, Engr. M. W., Topeka, Kan., that plans are not completed for the proposed improvement of freight terminal at Armourdale Yards, Kansas City, Kan. J. B. Berry, Ch. Engr., at Chicago, is in charge.

CHICAGO & ILLINOIS MIDLAND.—We are officially advised that the Central Illinois Ry. Co. will be known hereafter as the Chicago & Illinois Midland, to avoid confusing it with the Illinois Central R. R. The company was chartered last summer to build a line from Roodhouse to Paris, Ill. This company has bought the present Pawnee Railroad, which extends from Auburn to Pawnee, Ill., and is extending the same from Pawnee to Taylorville, a distance of 16 miles. It further contemplates, during the coming year, rebuilding the Pawnee Railroad between Pawnee and Auburn, making the line 25 miles long in all, of first-class construction and capable of carrying heavy traffic. Contract has been let to JOHNSTON & GROMMETT BROS., of St. Louis, Mo., for grading and concrete work; and to the WISCONSIN BRIDGE & IRON CO., of Milwaukee, Wis., for steel work. A. H. Stone is Ch. Engr., at Pawnee, Ill., and J. J. Hart, 215 Dearborn St., Chicago, is Gen. Mgr.

CAROLINA COAST.—An application has been filed at Richmond, Va., with the State Corporation Commission for permission to merge the Virginia & Carolina Coast R. R. Co., the Suffolk & Carolina R. R. Co., and the Carolina Coast R. R. Co., under the title of the Carolina Coast R. R. Co., with the principal offices at Norfolk. The capital stock of the merged company, it is reported, will be $7,500,000. The president of the company will be J. T. Odell, of New York, prominently connected with the "Steel Trust" and lumber interests throughout the Eastern States. Back of the merger are plans for the opening up of the large iron deposits in North Carolina and building puddling furnaces and converters for the manufacture of steel in or near Norfolk, the terminus of the proposed merged lines. It is reported that "the three companies are paying about 7% on $4,500,000 capitalization, and with the extensive additions in the way of extended roads, water front and improvements, blast and converting furnaces, lumber mills and other developments, the concern will probably soon become one of the richest in the state."

CANADIAN PACIFIC. — The Boston "Herald" states that "J. V. Leonard, Asst. Gen. Mgr. of the Canadian Pacific R. R., at Montreal, Que., confirms a report that his road is having a preliminary survey made from Debec Junction to Bancroft, Me., 40 miles southwest. If it is determined to construct a line to Bancroft so that the Canadian Pacific and Maine Central roads will have a direct outlet from Aroostook County, Me., and northern New Brunswick to Boston."

CHATTANOOGA, ANDERSON & ATLANTIC.—It is reported that this company, which was formed some months ago by the consolidation of the projected Ohio, Knoxville & Port Royal and the Ohio River Anderson & Tidewater, proposes to issue $8,000,000 of 5% bonds to build the road from Chattanooga, Tenn., via Clayton, Ga., and Westminster and Anderson, S. C., to Charleston, S. C. Albert R. Morton, of Chicago, is Pres.; Frederick A. Johnson, First Vice-Pres.; P. K. McCully, Chicago, Treas.; J. E. Breazelle, Secy.; M. F. Whitner, Anderson, S. C., General Counsel; and Lewis R. Emery, Chicago, Assistant Treas. and Assistant Secy. The offices are at Anderson, S. C., and Chicago.

CHICAGO, MILWAUKEE & ST. PAUL, OF IDAHO.—This company has filed articles of incorporation in Idaho to build the Idaho section of the Chicago, Milwaukee & St. Paul extension to the Pacific coast. The road will enter Idaho from Montana at some point between the 46th and 47th degrees of north latitude. The capital stock is $2,000,000.

ESCANABA & LAKE SUPERIOR.—W. E. Wells, Gen. Mgr., Wells, Mich., writes us that contracts will be let about May 1st for building the extension from Gleason to Austin, Mich., 15 miles.

ERIE (Penhorn Creek R. R.)—We are officially informed that bids have been asked for by the Chief Engineer of the Erie R. R. Co. for construction of a four-track railroad through Bergen Hill, Jersey City, N. J., to parallel the present two-track tunnel of that company. The corporate name of the new line will be the Penhorn Creek R. R. Co. This work consists of an open rock cut through Bergen Hill of an average depth of about 70 ft. and a length of about 4,500 ft. The material from this excavation is to be moved westwardly to form embankments for new passenger connections to existing lines operated by the Erie R. R. Co., "flying junctions" being provided to avoid crossing any traffic at grade. It is estimated that there will be 120,000 cu. yds. of earth and 480,000 cu. yds. of rock to be excavated, and 15,000 cu. yds. of concrete masonry to construct in connection with this contract. This work will be under the direction of Francis Lee Stuart, Ch. Engr., 26 Cortlandt St., New York City.

GREEN RIVER VALLEY.—It is reported that contracts will be let about April 1 at Nashville, Tenn., for building this road, said to be a Louisville & Nashville project, from Scottsville to Stanford, Ky., 100 miles, via Edmonton, Columbia and Liberty. Headquarters of company will be at Nashville, Tenn. W. K. Asbill, of Columbia, Ky., is interested. Estimated cost is from $2,000,000 to $3,000,000.

GENESEE RIVER R. R. (Erie).—We are officially advised that contracts will be let in the spring for building this railroad, which is to be an Erie line. It will extend from Hunts to Cuba, via Belfast, N. Y., 33 miles. F. D. Underwood is Pres.; Francis Lee Stuart is Ch. Engr., 26 Cortlandt St., New York. Company was incorporated last August with $350,000 capital. Noted on Jan. 25, under Erie R. R.

GRAND TRUNK PACIFIC.—It is reported that this company is asking for bids until Feb. 20th, for building the section of its proposed road from Touchwood Hills, west to Edmonton, a distance of about 450 miles. The company has now under construction 210 miles from Lake Superior to the main line to the north, and 275 miles from Portage la Prairie to the Touchwood Hills, west of Winnipeg. B. B. Kelliher is Ch. Engr., at Montreal, Que.

LONG ISLAND R. R.—J. R. Savage, Ch. Engr., Jamaica, N. Y., informs us that the report that the L. I. R. R. Co.'s tracks are to be depressed in Patchogue, L. I., is erroneous.

LOUISVILLE & NASHVILLE.—A newspaper report from Baltimore, Md., states that this company will ask for bids soon for building a line between Williamsburg and Beattyville, Ky. W. H. Courtenay is Ch. Engr., at Louisville, Ky.

MANGHAM & NORTHEASTERN.—We are officially informed that contract has been let for the construction of this railway to the RICHLAND CO., of Mangham, La. The line will extend from Mangham to Lake Providence, nine miles. Of this distance two miles are built and the bridges are nearly finished. Surveys have been run and right-of-way and capital have been secured. O. A. Wright is Pres. and S. H. Martin is Ch. Engr., both at Mangham, La. The company was recently incorporated, with $500,000 capital.

MICHIGAN CENTRAL.—At final hearing of the special federal commission the plans of this company for tunneling the Detroit River were adopted. Work is to be commenced about March 1.

MISSOURI, IOWA & NEBRASKA.—Incorporated in Missouri to build a railroad from a point in Adair County, Mo., to Sioux City, Ia., with a branch from a point in Wayne County, Ia., to Des Moines. Capital stock, $500,000. Incorporators: J. C. McKinley, of Unionville, Mo.; A. B. Hargeard and Rose Hargeard, of Chicago; E. W. Monroe, G. C. Miller, F. H. Wentworth, W. O. Robbins, of Unionville, Mo.

MISSOURI, KANSAS & TEXAS.—It is reported that this company has let contracts to F. J. McREYNOLDS & SON, of Atoka, Tex., for rebuilding line between Atoka, Tex., and Denison, Tex.

MIDLAND AIR LINE.—Company has been incorporated in Iowa to build a railroad from Des Moines, Ia., to Port Arthur, Tex. Capital stock, $1,000,000. Incorporators: J. W. Crofford, E. H. Dancer, J. O. Bleaksley, B. E. Crofford, J. N. Brown, H. A. Spreague, D. F. Keller, of Lamoni, Ia.; M. L. Temple, of Osceola, Ia.; A. W. Davis and M. C. Betts, of Pleasanton, Ia.

NORTH COAST RY.—We are officially advised that J. G. WHITE & CO., 49 Exchange Pl., New York, have general construction contract for building this line. It is to run from Walla Walla to Seattle, Wash., 300 miles. Everything is financially completed. The line will be primarily a coal carrying road. Surveys are all made. Frank A. Dudley, Niagara Falls, N. Y., is Pres., and Robert E. Strathorn is Gen. Mgr., at Spokane, Wash.

RED BLUFF & REDDING.—Surveys for a line from Red Bluff to Redding, Cal., are being made under the direction of S. F. Williams, Ch. Engr., of Red Bluff, Cal.

OKLAHOMA CITY & TEXAS.—G. B. Stone, Pres., Oklahoma City, Okla., writes us that company expects to complete surveys for its line about March 1st and hopes to be ready to let contracts during the coming summer.

SOUTHERN RY.—The Pink Sheet Bulletin states that R. HORNECK, of Bristol, Tenn., has been awarded the contract for the construction of extensive railroad yards for the Southern Railway, extending from Hamilton Springs to Cumberland Gap, on the Kentucky line. Mr. Horneck will also construct about eight miles of track, a roundhouse and other buildings.

SHREVEPORT, JONESBORO & NATCHEZ.—This company has filed its charter to build a line southeast from Jonesboro to Natchez, Miss., and northwest to Shreveport, La. ,together about 250 miles. It is reported that about twelve miles have been completed from Jonesboro to Gars Mill and that the line is under construction from that point eas. to Columbia, La., 24 miles farther. J. S. Cargill is Gen. Mgr., at Jonesboro. The directors are C. E. Neeley, of St. Louis; W. W. Brown and W. R. Ramsey, of Camden, Ark.; R. N. Garrett, of Eldorado, Ark.; R. W. Hule, of Hodge, La.; C. W. Dodson, of Hot Springs, Ark.; C. C. Henderson, of Arkadelphia, Ark.

SIERRA & EASTERN.—Incorporated in California to build a railroad from Tehachapi, Cal., to Searchlight, Nev., 200 miles. Capital stock, $250,000. Incorporators: H. M. McIntosh, of Chicago; C. A. Canfield, of Los Angeles; J. A. Chanslor, of San Francisco; Ida M. Jameson, and J. W. Jameson, of Tehachapi, Cal.

SAN FRANCISCO, & NORTHWESTERN.—Surveys have been made, it is reported, for proposed extension of this road from Shiveley, Cal., south of San Francisco, 260 miles. H. C. Phillips, San Francisco, Cal., is Ch. Engr.

WASHINGTON & WESTERN MARYLAND.—The commissioners of the District of Columbia have approved an act to amend an act to incorporate the Washington and Western Maryland Railroad Co. The original route follows the southern bank of the Chespeake and Ohio Canal from the District line to the Aqueduct bridge over the Potomac River, where it makes a junction with the tracks of the Georgetown Barge, Dock & Elevator Co., which run from that point to Rock Creek. The route proposed by the amendment is on the opposite side of the canal just north of the Canal road with a crossing of the road and canal at a point just east of the Chain bridge. The original charter of the road required that the road be completed within three years from the date of the passage of the act, March 2, 1889. Plans were submitted and grades approved within a year or two after that date, but no construction work has been done.

ELECTRIC RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

NORWAY, ME.—William G. Rand, Treas. and Gen. Mgr., of the Norway & Western Railroad Co., 219 Tremont Bldg., Boston, Mass., is reported to have stated that 13 miles of sub-grade have been completed on the line which will connect Norway, Waterford, Albany and Stoneham, and that the balace of the work will be finished as soon as weather permits. Gasoline motor cars will be used. Charles T. Birchard, of Boston, Pres.; L. H. Burnham, of North Waterford, Me., Vice-Pres.; Jonathan Bartlett, of East Stoneham, Me., Secy.; William G. Rand, of Boston, Treas. and Gen. Mgr.

FITCHBURG, MASS.—We are officially advised that the Fitchburg & Princeton St. Ry. will be about ten miles long, extending from Fitchburg to Princeton and Westminster, Mass. E. S. Douglass, Holden, Mass., is Ch. Engr.

NORWICH, CONN.—We are officially informed that the NATIONAL CONSTRUCTION & EQUIPMENT CO., 42 Broadway, New York, has the contract for building the Norwich & Westerly Ry., from Norwich to Poquetannock, Ledyard, Hallville, North Stonington and Providence, R. I., 22 miles. About eight miles of the roadway are now graded. E. W. Jackson, Norwich, is Ch. Engr.

FISHERS ISLAND, N. Y.—The Fishers Island Railroad Co. has been incorporated, with a capital of $12,000, to operate a cable or electric railway from Mansion Wharf to Munnatawket Wharf, Fishers Island, Suffolk County. The directors are: Walton Ferguson, Alfred L. Ferguson, John F. Dempsey, Walton Ferguson, Jr., Alfred E. Bullock, of New York City; Frank E. Hine, Radford C. Shanklin and Charles W. Gordon, of Fishers Island; and Alfred W. Dater, of Stamford, Conn.

BROOKLYN, N. Y.—An application for permission to lay tracks granted 15 years ago by the Commissioners of New Utrecht has been filed in the office of the County Clerk. It is the application of the Coney Island, Fort Hamilton & Brooklyn R. R. Co. for permission to construct a double-track railroad with overhead wires through Benson Ave., 23d Ave., Bath Ave. and Seventh Ave. to the city line from the Shore Road. Attached to the application are the signatures of Martin H. White and A. B. Voorheis, Comrs. of Highways of the town of New Utrecht. The application was granted on Feb. 10, 1891.

BALTIMORE, MD.—Bids are asked until March 10, by the Roberts & Abbott Co., Maryland Trust Bldg., Baltimore, for approximately 860,000 cu. yds. grading and for laying 33¼ miles of double-track for the Washington, Baltimore & Annapolis Electric Ry. Plans and specifications will be on file at the offices of the Roberts & Abbott Co., Schofield Bldg., Cleveland, O., and Maryland Trust Bldg., Baltimore, after Feb. 18. Copies of same will not be forwarded. (Advertised, Engineering News.)

HENDERSONVILLE, N. C.—We are officially informed that engineers will be put upon proposed line survey for the Appalachian Interurban R. R. in a few weeks. About $100,000 of the proposed capital is secured. No contracts are let. The road is to be about 65 miles long, extending from Biltmore, to Mills River, Horseshoe, Batcave, Columbus and Tryon. C. W. A. Smith, Hendersonville, is Pres.

ANDERSON, S. C.—J. E. Sirrine, Greenville, S. C., Ch. Engr., of Anderson Traction Co., writes us that contracts will be let about March 1 for proposed extension to Belton. Previously noted.

HATTIESBURG, MISS.—The Hattiesburg & Rawls Springs R. R. Co. has been organized to build a line from Hattiesburg to Rawls Springs and Mammoth Springs, 6 miles. J. R. S. Pitts, J. P. Hattiesburg, and B. F. Ballard are interested. The company will undertake to have the line completed in five years, and to furnish light and power along the route wherever needed.

CHATTANOOGA, TENN.—C. E. Schwing, Gen. Mgr., of the Chattanooga Electric Ry. Co., writes us that this company has made surveys for several extensions to its present system and for some changes in present existing lines and also contemplates rebuilding nearly all of its lines as well as the car barns and shops. Company is not in a position yet to discuss letting of contracts. The company operates 42 miles of railway.

YOUNGSTOWN, O.—We are officially advised that the Cleveland Construction Co., Akron, O., is making final surveys for the Youngstown & Ohio River Ry. Co. line. It will be about 60 miles long. T. W. Hill, 227 Superior St., Cleveland, O., is Pres. W. R. Christy, of Akron, O., is Vice-Pres.

GALION, O.—We are officially advised that the Galion Southern Ry. Co. has made surveys and secured option on all right-of-way for its proposed line across Crawford County to Galion. Contracts for construction of the railway will be let in the spring. Walter L. Ball, Fredericktown, O., is Pres. J. W. Atkinson, of Galion, is Ch. Engr. The line will be about 27 miles in length.

MARIETTA, O.—We are officially informed that surveys have been made between Belpre, O., and Pomeroy, 28 miles, for the Marietta, Belpre-Parkersburg, Pomeroy & Gallipolis Tramway Co.'s railway. Surveys between Belpre and Marietta, twelve miles, and between Middleport and Gallipolis, 14 miles, will be started soon. Right-of-way is now being secured. This line will become a division, when built, of the Black Diamond Traction system. Mr. Boone and his associates are now at work promoting the following subsidiary companies to operate street cars in southeastern Ohio, including the building of a suspension bridge across the Ohio River between Belpre, O., and Parkersburg, W. Va. (1) The Zanesville & Southeastern Ohio Ry. Co. Main line, Zanesville to Belpre-Parkersburg. To be known as the "Zanesville & Meigs Creek Valley Division." (2) The Caldwell, Athens, Glouster, Corning & Nelsonville and Belpre Tramway Co. Main line, Caldwell to Nelsonville. To be known as the "Caldwell & Hocking Valley Division." (3) The Marietta, Belpre-Parkersburg, Pomeroy & Gallipolis Tramway Co. Main line, Marietta to Gallipolis. To be known as the "Ohio Valley Horse Shoe Division." (4) The Pomeroy, Athens, Nelsonville and Logan & Wellston Tramway Co. Main line, Middleport, via Pomeroy, Rock Springs, Kingsbury to Harrisonville, with one arm of the Y; Harrisonville via Welch and Downington to Logan, with branches to both Athens and Nelsonville, and one other arm of the Y; Harrisonville via Wilkesville to Wellston. To be known as the "Hocking Valley Big Y Coal Division." (5) The Gallipolis, Huntington, Ironton & Portsmouth Tramway Co. Main line, Gallipolis to Portsmouth. To be known as the "Coal and Iron Division." (6) The Marietta, Woodfield & Bellaire Tramway Co. Main line, Marietta to Bellaire, to follow the west bank of the Ohio River. To be known as the "Oil & Pittsburg Coal Division." (7) To connect states of Ohio and West Virginia, the Ohio River, between Belpre and Parkersburg will be bridged by The Ohio River, Belpre-Parkersburg Bridge & Ferry Co. Ohio charter issued Aug. 21, 1905. Charter for West Virginia portion will soon be applied for. It is planned to build this bridge by having the bridge bonds guaranteed by lines centering at Belpre, namely, divisions one, two and three of the Black Diamond Traction Co. Albert E. Boone is Pres. and Gen. Mgr.; Arthur J. Sheppard, First Vice-Pres.; Frank J. Terry, Second Vice-Pres.; Mrs. Mary E. Boone, Secy. John W. Marquand, Treas., all of Zanesville, O. B. E. Cutler is Ch. Engr., Grove City, Pa.

MANSFIELD, O.—We are officially informed that contracts will be let early in March for the Wooster & Mansfield Electric Ry. Co.'s line from Wooster to Millbrook, Shreve, Lakeville, Loudonville, Perryville, Lucas and Mansfield, 42 miles. Preliminary surveys are completed and right-of-way obtained. Capital has been secured. W. Bancroft Mellor, 405 Drexel Bldg., Philadelphia, is Pres. Pugh & Hubbard, Real Estate Trust Bldg., Philadelphia, are the Engrs.

COLUMBUS, O.—J. S. Sites, Vice-Pres. of the Ohio Central Ry. Co., writes us that right-of-way is one-half secured for the line from Columbus to Baltimore, Thurston, Millersport, Newark, Lancaster and North Lexington, 150 miles in length. Mr. Sites may be addressed at Lancaster, O.

WINONA LAKE, IND.—H. S. Tinker, Supt. of the Winona Interurban Ry. Co., Winona Lake, informs us that contracts will be let within two months' time for building the line from Warsaw to Mentone, Akron, Gilead, Chili, Brownell and Peru, Ind., 44 miles. Nine miles of line are already in operation. Survey has been practically completed and right-of-way is nearly completed. The project is financed. Specifications are not yet completed. R. M. Murray is Ch. Engr., at Winona Lake; and H. J. Heinz is Pres., Pittsburg.

MARION, IND.—John Ratliff, Engr., writes us that he has proposed electric railroad line almost located, from Marion to Rigdon, Independence, Elwood, Tipton and

Indianapolis, ... miles. Right-of-way is being ... account of previous option on ... proposed route now held by a ... company. Financial arrangements ... being made. Company which will build ... railway has not formally organized.

PEORIA, ... —We are officially advised that the ... surveys for ... Traction Co., has completed ... Champaign, ... lines between Decatur and ... Bloomington, ... ton and Bloomington, and ... of-way ... Peoria, 130 miles. Right-of-way ... half secured. Capital has been obtained ... bids for construction work are being ... ved. Grading is completed between ... and Bloomington. Rails and ties ... tly purchased and contracts have been ... for some grading. L. E. Fischer is ... Mgr., at Danville, Ill.

JOPLIN, ... —W. H. Mitchell, of New York City, ... others have been granted a franchise ... a street railway line. E. C. H. Squire, ... City Clerk, informs us that the holders of ... franchise still have some time in which to ... begin construction. Gasoline motors will be used.

MARSHALL, MO.—We are officially informed that the Central Ry. Co. has made all surveys ... for its line and that greater part of the right-of-way has been obtained. Contracts ... probably will be let early next spring and all ... matters are progressing favorably. The line is to be 50 miles long, operated by electric motive power, from Marshall to ... Sedalia and from Marshall to Miami, Mo. ... Edward C. Wright, of Kansas City, Mo., is Pres. and Ernest D. Martin is Gen. Mgr., at Marshall, Mo.

SEATTLE, WASH.—L. M. RICE, 603 Pacific Block, Seattle, Wash., writes us that he has general contract for building the Seattle, Everett & Skagit Ry., from Seattle to Everett and has charge of locating, constructing and placing contracts for power and rolling stock for the railway. Right-of-way is partly obtained. Money for construction is secured. W. H. Goldson, Seattle, Wash., is Pres.

TACOMA, WASH.—We are officially advised that surveys are completed for proposed Puyallup Valley Traction line from Tacoma to Puyallup, nine miles. Right-of-way mostly obtained. Financial arrangements will be made soon. Fred. J. Chamberlain, Puyallup, Wash., is Pres.; L. A. Nicholson is Ch. Engr., at Tacoma.

FRESNO, CAL.—It is reported that the Fresno Traction Co. has been granted a franchise covering several lines, and the F St. division will be the first constructed. The company will co-operate with the Southern Pacific R. R. Co. in the construction of a three-tube conduit subway that will cost the traction company about $20,000. New car houses and repair shops, both for the railway lines and the San Joaquin Power Co. may be erected at Sunnyside. R. S. Masson, Los Angeles, Cal., is Ch. Engr.

LIGHT AND POWER PLANTS.

The names of parties awarded contracts are printed in capital letters.

MONTPELIER, VT.—It is stated the Consolidated Lighting Co., of Montpelier, will make improvements and extensions in its system, costing in the vicinity of $100,000. Additional water wheels will be put in at the Bolton Falls plant and when the improvements are completed the company will have a plant of 7,200 HP. Lewis Laurence is Ch. Engr.

BOSTON, MASS.—Council voted against establishment of a municipal lighting plant, 42 to 16, on Feb. 1.

STAMFORD, CONN.—It is reported that the New York, New Haven & Hartford Railroad Co. will expend $300,000 in equipping a new power-house for electricity at Stamford. The road is being equipped with the single phase electrical equipment from New York to Stamford, and that in time electricity will be used for operating the road from New York to Boston. Edward Gagel is Ch. Engr., New Haven, Conn.

BRODALBIN, N. Y.—We are officially advised that plans and specifications are being prepared by William P. Judson, Consult. Engr., of this town, for the plant of the Brodalbin Electric Light & Power Co. Estimated cost, $40,000. Work will be advertised in Engineering News at later date.

BROOKLYN, N. Y.—The Brooklyn Rapid Transit Co., it is reported, will build a substation at Richmond Hill, 36 × 75 ft. There will be two transformers installed, with a total capacity of 1,000 KW., or about 4,000 HP. W. S. Menden is Ch. Engr.

BROOKLYN, N. Y.—The Bureau of Yards and Docks, Navy Dept., has prepared specifications covering the furnishing and installation of six 440 HP. water tube boilers and appurtenances; one steel plate smoke stack, 175 ft. high and 12 ft. in diameter; two feed water sets; three condenser units; five induction motors and a complete equipment of water and steam piping, at the Navy Yard, Brooklyn, as an addition to the power plant at that navy yard. Estimated cost, $139,000. Specifications should be ready for distribution in about three weeks and bids probably will be opened late in March or early in April. Mordecai T. Endicott is Chief, Bureau Yards and Docks, Navy Dept., Washington, D. C.

BURLINGTON, N. J.—We are officially advised that the Wellman-Seaver-Morgan Co., Cleveland, O., is Engr. for the proposed electric power-house to be erected here by the U. S. Cast Iron Pipe & Foundry Co. J. A. Hayes is Res. Mgr.

ORANGE, N. J.—Bids are asked until 8 p. m., March 5, for lighting the streets of this city with electricity for terms of three and five years from Dec. 1, 1906. Edward Cheetham, Chn. Street Lighting Com. W. B. Gans, City Clk. (Advertised, Engineering News.)

NEWARK, N. J.—Council at Kearny has voted to ask permission of legislature to issue bonds for the construction of a municipal lighting plant. Cost, approximately, $60,000. J. F. Criswell is Town Atty.

READING, PA.—Plans have been completed for a power-house for the United Traction Co., of this city, at an estimated cost of $1,000,000. It will be a one-story brick structure, 150 × 600 ft. It is expected that the contract for the building and necessary machinery will be given at an early date. The plant will be capable of furnishing 10,000 HP. C. C. Long is Ch. Engr.

CHAMBERSBURG, PA.—The Cumberland Railroad Co. will erect a power-house here to cost, including equipment, $135,000, it is reported.

EASTON, PA.—Bids are asked until 4 p. m., Feb. 14, for the lighting and maintenance of gas and oil lamps for city streets. John Mutchler, City Clk.

HAZELTON, PA.—A 10-year contract has been awarded to the HAZELTON ELECTRIC LIGHT CO. for lighting the streets of West Hazelton at $65 per light for arc lights.

PITTSBURG, PA.—H. T. Douglass, Ch. Engr., Wabash Pittsburg Terminal Co., has stated that plans have been completed for the proposed new electric power plant for the terminal building and freight station at Liberty Ave. and Ferry St. The work is estimated to cost about $50,000.

SALISBURY, MD.—Council has granted a franchise to the Salisbury Gas Co. to establish a gas plant here. The company is capitalized at $75,000. The directors are Daniel C. Spruance, of Smyrna, Del.; Josiah Marvel, of Wilmington, Del.; M. A. Humphreys, James F. Ellegood and W. S. Gordy, Jr., of Salisbury.

NORFOLK, VA.—The Hampton, Phoebus & Old Point Gas Co. has been organized at Norfolk to furnish gas to the places named. The officers are: Hunter R. Booker, of Hampton, Pres.; Dr. E. W. Shields, of Hampton, Secy.; and B. F. Batchelor, of Norfolk, Treas.

SHENANDOAH, VA.—We are advised that bids are desired for furnishing brick, lime and cement in connection with the construction of the municipal lighting plant. George C. Morgan, 169 Jackson Boulevard, Chicago, Ill., is Supervising Engr. A. R. Martin, Clk.

WINSTON-SALEM, N. C.—Winston-Salem Power Co. has authorized the issuance of $150,000 of bonds for improvements, including the establishment of gas plant if decided feasible.

ATLANTA, GA.—The Southern Light & Power Co. is surveying five acres of land at Newnan, Ga., with a view to completing plans to build a dam which will act as a reservoir for generating power in connection with the company's other developments at Gainesville, Cartersville and Tallulah Falls. It is understood that a total of 100,000 HP. will eventually be developed. T. I. Kelly, of Atlanta, is Pres.

CALHOUN, GA.—Georgia Chambers & Co., of this town, have been granted a 25-year franchise to construct and operate an electric lighting system.

TAMPA, FLA.—See under Water Supply.

DELAND, FLA.—J. H. Kruse, Supt., Citizens Mfg. Co., writes that he desires information on reinforced concrete construction for a gas-house and other similar work and tank construction for water and oil purposes.

BIRMINGHAM, ALA.—Birmingham Railway, Light & Power Co. is reported to be about to make extensive improvements during the year, including the installation of a high-pressure gas main, in order to serve the entire new district now covered by the street railway with gas, the building of viaducts over the various railroad crossings, etc. The building of a large power plant in the coal-mining district is also being considered. Robert Jemison is Pres.

JACKSON, MISS.—It is reported that LEARNED & MARTIN CONSTRUCTION CO., Monadnock Block, Chicago, Ill., has been awarded contract for the erection of power-house for the Jackson Electric Railway, Light & Power Co.

NEW ORLEANS, LA.—It is reported that the Clairborne St. power station of the New Orleans Railways Co. will be enlarged and capacity increased to 3,000 HP. E. B. McKinney is Ch. Engr. Power Station.

NEW ORLEANS, LA.—The Bureau of Yards and Docks, Navy Dept., has prepared a specification for a power-house building and chimney at the Naval Station, New Orleans. The building is to be a one-story brick and steel structure, about 73 ft. by 106 ft. in plan, and the chimney 175 ft. high, with 8 ft. diameter inside. A traveling electric crane of 10 tons capacity is required. The estimated cost is $30,000. Advertisement should appear in about two weeks, and the bids will probably be opened the latter part of March. Mordecai T. Endicott is Chief Bureau Yards and Docks, Navy Dept., Washington, D. C.

LAFOLLETTE, TENN.—The Lafollette Water-Works, Electric Light & Telephone Co. has awarded a contract to the FORT WAYNE ELECTRIC LIGHT WORKS, Fort Wayne, Ind., for the construction of a complete electric lighting plant.

MASSILLON, O.—Board of public service will shortly ask for bids for lighting the streets of this city with gas, electricity, gasoline or oil. Harold Howald is City Engr.

CINCINNATI, O.—It is stated that the contract for the construction of the power plant for the Sinton Hotel has been awarded to the PRATHER ENGINEERING CO., of Cleveland, O., at about $160,000. The contract includes the lighting, heating and ventilating, power, refrigerating and filtration plant to have a daily output of 300,000 gallons of water. Frank M. Andrews, Arch., Conover Bldg., Dayton, O.

CINCINNATI, O.—Bids are asked until Feb. 23 for the construction, delivery and erection of three direct connected electric generating units of 150 KW. capacity, each driven by an engine of the condensing turbine type or of the vertical reciprocating compound condensing type of one switchboard, two air pumps and condensor units, piping foundations, floors and all other appurtenances. E. C. Prior, Actg. Clk. Bd. Trustees Water-Works Comrs.

LAPORTE, IND.—The Indiana Railway Co. will build a $400,000 central power plant at this place. J. McM. Smith is Vice-Pres. and Mgr. at South Bend, Ind.

LAFAYETTE, IND.—The Indiana Electric Transmission Co. has been organized to maintain electric light plants and water-works systems in Sullivan and Greene counties. Capital stock, $250,000, with headquarters at this place. Howard L. Hyatt and William H. Hornberger are interested.

GRAND RAPIDS, MICH.—We are officially informed that bids will be received probably about May 1 for the construction of the power plant on the Manistee River for the Michigan Hydraulic Power Co. Estimated cost, $80,000. H. Von Schon is Engr., Detroit, Mich.

PONTIAC, MICH.—According to official advices, bids will be asked about April 1 for the construction of the Clinton River Power Co.'s plant at this place. $80,000 is the estimated cost. H. Von Schon, Detroit, Mich., is Engr.

COLLINSVILLE, ILL.—The Collinsville Gas, Electric & Refrigeration Co., according to official reports, has awarded a contract to J. B. QUIGLEY, Bank of Commerce Bldg., St. Louis, Mo., for construction of a gas plant.

CHICAGO, ILL.—It is reported that plans now under contemplation by the Metropolitan West Side Elevated Railroad Co. include construction of a new power-house to cost $500,000. M. Conealy is Ch. Engr.

CHICAGO, ILL.—Bids are asked by the board of trustees, Sanitary District of Chicago, until noon, April 4, for furnishing transmission line poles. Robert R. McCormick, Pres. Bd. J. J. Bryan, Clk. (Advertised, Engineering News.)

KEWANEE, ILL.—The Kewanee Light & Power Co. will spend about $50,000 on improvements to the plant, including the erection of a new boiler-house of brick and steel and the extension of gas mains in this city and Wethersfield. New equipment will be installed. Fred Marvin is Ch. Engr.

ROCKFORD, ILL.—The Rockford Gas, Light & Coke Co. has prepared plans for additions to the works in the west end. Among the additions and improvements planned are a steel holder, with a capacity of 1,000,000 cu. ft. of gas, a large addition to the retort house, a new governor and meter house, and the installation of new machinery.

ST. CLOUD, MINN.—The Public Service Co. writes us that it will soon be in the market for cast iron gas mains as follows: 24 ft. of 12-in., 729 ft. of 10-in., 3,959 ft. of 8-in., 41,650 ft. of 4-in., 2,232 ft. of 6-in., and 2,185 ft. of 3-in. It is reported that this company will have plans ready for bidders about Feb. 10 for construction of a gas plant. George Marvin is Ch. Engr.

DULUTH, MINN.—The Duluth-Edison Electric Co. has reorganized here with a capital of $2,000,000. The company will expend $150,000 at once on changing from steam to water power.

ATKINS, ARK.—B. F. Hill, of this town, has been granted a 20-year franchise for constructing and maintaining an electric light plant.

OZARK, ARK.—We are officially informed that the Ozark Light, Power & Traction Co. has been granted a franchise by council, and is ready for estimates on equipment.

STROUD, OKLA.—See under Water Supply.

WYNNEWOOD, IND. T.—Plans and specifications are on file at office of Engineering News, New York, for construction of a combination electric light and water-works system. Bids are asked until Feb. 14, as noted on Feb. 1.

DENVER, COLO.—The Lacomb Electric Light Co. will rebuild its plant, recently destroyed by fire, at a cost of about $25,000. Oliver B. Kohl is Gen. Mgr.

SPOKANE, WASH.—William F. Keyle and associates have been granted a franchise to install a gas plant here.

PORTLAND, ORE.—The Oregon Water Power & Railway Co. will build a new substation at Oak Grove. A 450 KW. transformer and a rotary will change the alternating to a direct current so that it can be fed into the trolleys. George I. Brown is Ch. Engr.

ALAMEDA, CAL.—City has awarded a contract to the CHAS. C. MOORE CO. of San Francisco, for a new engine, costing $8,718, for the municipal light works, and to the NATIONAL ELECTRIC CO., of Milwaukee, for a generator, to cost $4,670.

PALO ALTO, CAL.—We are officially informed that A. M. Hunt, San Francisco, Cal., is Engr. in connection with the municipal water and light plant to be constructed. Noted on Dec. 28.

PICTON, ONT.—Bids are asked until 6 p. m. Feb. 15 for furnishing one alternator of 175 KW. capacity, and other necessary power house equipment, enclosed arc lamps, wiring, etc. D. L. Bongard, Secy. Bd. Electric Light and Water-Works Comrs.

BRIDGES.

The names of parties awarded contracts are printed in capital letters.

SALEM, MASS.—Competitive plans are asked by the County Commissioners of Essex County until 10.30 a. m., Feb. 14, for a bridge on Western Ave., Gloucester, Mass.

BOSTON, MASS.—Bids are asked by the Charles River Basin Comrs., 307 Boylston St., Boston, until March 5, for constructing and erecting a Scherzer rolling lift bridge in the Charles River here. Specifications are on file at offices of Engineering News, in Chicago, Washington, D. C., and New York. (Advertised, Engineering News.)

NEW YORK, N. Y.—James W. Stevenson, Bridge Comr., 13 Park Row, New York, is reported to have stated that bids will soon be asked for the structural steel work of Manhattan Bridge or Bridge No. 3, New York.

An ordinance has been passed by the Board of Aldermen appropriating $175,000 for the construction of a bridge across Mosholu Parkway, Boro. of Bronx.

BROOKLYN, N. Y.—We are officially informed that bids were received on Jan. 30 for proposals No. 2 and No. 3, in connection with the Brighton Beach Improvement project, as follows: Proposal No. 2, for furnishing and erecting highway and railroad bridges (1) Millikea B.os., 11 Broadway, New York, $150,000; (2) Fort Pitt Bridge Works, 6 Broadway, New York, $204,750; (3) McClintic-Marshall Construction Co., 13 Park Row, New York, $198,900; (4) King Bridge Co., 247 Broadway, New York, $214,750; (5) Hay Foundry & Iron Works, Newark, N. J., $202,800; (6) Passaic Steel Co., Paterson, N. J., $204,750; (7) Louis F. Shoemaker, Philadelphia, Pa., $204,425; (8) American Bridge Co., 42 Broadway, New York, $204,725; (9) Berlin Construction Co., 220 Broadway, New York, $214,500. Overhead girders (150 tons): (1) $14,250; (2) $15,750; (3) $14,550; (4) $18,500; (5) $14,950; (6) $15,450; (7) $14,700; (8) $18,000; (9) $14,550. Date of completion of work: (1) Before May 1, 1907; (2) May 1, 1907; (3) May 1, 1907; (4) May 1, 1907; (5) as specified; (6) May 1, 1907; (7) twelve months from award; (8) four months after shipment; (9) May, 1907. Supplementary bids based on diverting Brighton Beach traffic to the tracks of the Long Island Railroad Co., south of crossing, as follows: (1) $179,100; (2) $182,130; (3) $182,520; (4) $185,250; (5) $185,250; (6) $186,030; (7) $184,200; (8) $193,050; (9) 198,900. No supplementary bids for posts and girders. Proposal No. 3, for furnishing and erecting 5-ft. iron fence on retaining walls, fence to be erected between Church Ave. and the Long Island Railroad crossing: Wayne Iron Works, Philadelphia, Pa., $147,375; Anchor Post Iron Works, 15 Cortlandt St., New York, $129,750; F. E. Carpenter Co., 7 Warren St., New York, $129,850; Eagle Iron Works, 401 East 147th St., New York, $222,875; Belmont Iron Works, Philadelphia, Pa., $24,625; Hecla Iron Works, 118 North Eleventh St., Brooklyn, $27,125; J. L. Mott Iron Works, 88 Beekman St., New York, $30,000.

WEST NEWTON, PA.—It is stated that the wooden bridge across the Youghiogheny River at this place will soon be replaced by a new steel structure.

SHARON, PA.—The large cantilever ore bridge of the Carnegie Steel Co., was destroyed by a recent storm, entailing a loss of $75,000. Bridge will be rebuilt at once.

DOYLESTOWN, PA.—We are informed that the Commissioners of Bucks County will erect a bridge between Tinicum Township and Prospect Park.

ODESSA, DEL.—Bids are asked by H. C. Salmon, Comr., until Feb. 20 for the construction of a steel draw-bridge across the Appoquirimink Creek, near here.

COLUMBUS, GA.—It is stated that the Birmingham, Columbus & St. Andrews Bay Railway Co. will erect a bridge across St. Andrews Bay here. W. M. Gordon, Birmingham, is Pres.

SHREVEPORT, LA.—We are officially advised that preliminary plans have been submitted to the War Dept. for the proposed traffic bridge across the Red River, here. The new structure will have a draw span, and will be about 1,000 ft. long. Andrew Querbes, is Mayor. N. F. Dorth is City Engr.

CLEVELAND, O.—Bids are asked by J. C. Dorn, Clk., until Feb. 14, for the construction of culverts and masonry abutments, in Cuyahoga county. Wm. H. Evans, Cleveland, is County Engr.

DAYTON, O.—An ordinance is before the Council to issue and sell $8,000 of bonds for constructing the extension of wing walls of the Washington St. bridge.

MILLERSBURG, O.—Plans are under consideration for an overhead bridge where the public road crosses the tracks of the Cleveland, Akron & Columbus Railroad Co. near Holmesville. A. B. Jones, Akron, O., is Engr.; Wm. Anderson, Millersburg, is Comr.

HAMILTON, O.—We are informed that plans have been submitted to the Board of County Commissioners by Frank J. Sloat, Gen. Mgr., Cincinnati Northern Traction Co., for a combination railway and highway bridge across Two-Mile Creek, here. The proposed bridge will have an 82-ft. span, 58 ft. wide and will cost about $15,000.

CLEVELAND, O.—It is stated that the Cleveland Belt Line Railway Co., Cleveland, O., will erect five new bridges.

BLOOMINGTON, ILL.—The contract for constructing eight bridges for the Illinois Traction Co. was awarded to BURNHAM & IVES, of Bloomington, Ill.

PEORIA, ILL.—The following bids were received and contract was awarded to low bidder for constructing bridge across Spoon River on the township line between Millbrook and Princeville townships: William Drinnin, Williamsfield, Ill., $2,799; Pan-American Bridge Co., Newcastle, Ind., $3,276; Decatur Bridge Co., Decatur, Ill., $3,477; A. Lucas & Sons, Peoria, Ill., $3465; Schmitt Construction Co. Tremont and Peoria, Ill., $2,880; J. C. Wigert & Bros., Bushnell, Ill., $3,200; J. S. Miller & Co., La Harpe, Ill., $3,500; J. V. Marcus, Peoria, Ill., $3,200; Bloomington Bridge & Manufacturing Co., $3,125; Continental Bridge Co., Chicago, Ill., $2,998; ILLINOIS BRIDGE & IRON CO., Sullivan, Ill., $2,543; Burnham & Ives, Bloomington, $3,200; K. H. Long, Carthage, Ill., $3,300; Joliet Bridge & Iron Co., $2,900; Fair Williams Bridge Co., Ottumwa, Ia., $2,935.

FT. BENTON, MONT.—Bids are asked by W. R. Leet, Clk., until March 6 for the construction of a combination bridge across Milk River, here. The new bridge will be 200 ft. long, 18 ft. wide, with 80-ft. approaches.

NEW ROCKFORD, N. DAK.—Bids are asked by the Board of County Commissioners until noon, March 6, for constructing a steel bridge across the Cheyenne River here. W. C. Schwoebel, New Rockford, is County Auditor.

FORT WORTH, TEX.—The Denver Railroad Co. will build about forty bridges between this city and Texline, half of which will be constructed of steel, the others to be cement arches.

BREMERTON, WASH.—Plans are in progress for a bridge across Brown's Bay at this place.

LOS ANGELES, CAL.—See under Sewerage.

MARYSVILLE, CAL.—It is reported that a movement is on foot for the erection of a steel bridge across the Feather River, to connect Marysville and Yuba City. The Northern Electric Co., Yuba City, Cal., is interested.

RIVERSIDE, CAL.—It is stated that a bridge will be erected at Santa Fe crossing for the Riverside extension of the San Bernardino Traction Co.

SELKIRK, MAN.—It is reported that the Canadian Pacific Railway Co. contemplates the erection of a steel swing bridge across the Red River at Selkirk, Man. W. F. Tye, Montreal, is Ch. Engr.

BUILDINGS.

The names of parties awarded contracts are printed in capital letters.

FALL RIVER, MASS.—Competitive plans are asked by J. Shea, Supt., until Feb. 17, for a 10-room school building for this city.

LOWELL, MASS.—The contract for the structural steel for the 6-story fireproof building at Merrimac and Central Sts. was awarded to the EASTERN BRIDGE & STRUCTURAL CO., of Worcester, Mass.

BROOKLINE, MASS.—We are informed that a new $100,000 municipal gymnasium will be built here. Dr. Walter Channing, Brookline, is Chn. Com.

BRIDGEPORT, CONN.—Plans have been completed for a "Flat Iron" building for Logan Bros. on Congress and Middle Sts. The plot is triangular, 86 × 54 ft. The new building will be brick and stone, four stories. Cost, $50,000.

MT. VERNON, N. Y.—The Board of Education made the following awards for the construction of addition to Public School No. 4, Mt. Vernon: contract for general work including electric wiring, was awarded to JOHN V. SCHAEFER, JR., & CO., 9 East 59th St., New York; contract for heating to A. B. BARR & CO., 6 River St., Yonkers, N. Y.

NEW YORK, N. Y.—We are informed that no contract has been awarded for the 8-story loft and store building at 139 West 19th St., New York, for F. A. Kursheedt, 356 West Broadway. Cost, $50,000.

Bids were opened Jan. 31 by J. H. O'Brien, Fire Comr., for the construction of firehouse on West 161st St., near Amsterdam Ave. Frank Sullivan, 103 East 125th St., New York, was low bidder, at $74,900.

NEW YORK, N. Y.—Bids are asked by C. B. J. Snyder, Supt. School Bldgs., until 11 a. m., Feb. 19, for construction of additions to Public School No. 32, at 357 West 35th St., Borough of Manhattan.

Bids are asked by C. B. J. Snyder, Supt. School Bldgs., until 11 a. m., Feb. 19, for installing electrical equipments in additions to Public School No. 89, on Newkirk Ave., Borough of Brooklyn.

NEW YORK, N. Y.—Bids were opened Feb. 5 for additions to Public School No. 68 at 109 West 127th St., Boro. of Manhattan. A. Nugent & Son, 103 East 125th St., New York, submitted the lowest bid for $35,970. Bids were opened for sanitary work in Public School No. 3, on Grove and Hudson Sts., Boro. of Manhattan. James Fay's Son, 205 East 51st St., New York, submitted lowest bid for $54,700. Bids were opened for additions to Public School No. 108, at 60 Mott St., Boro. of Manhattan. August Braeunig, 336 East 64th St., New York, submitted the lowest bid for $3,198.

Plans are in progress for two 5-story apartment houses for Charles Morris, 130 West 113th St., New York, at 164th St., near Amsterdam Ave. Neville & Bagge, 217 West 125th St., New York, are Archs.

NEW YORK, N. Y.—Bids are asked by John H. O'Brien, Comr., until 10.30 a. m., Feb. 14, for the erection of building for hook and ladder company No. 17, on 143d St., near Alexander Ave., Boro. of Bronx.

We are officially informed that the general contract for constructing kitchen, dining hall, storage-house and power-house for the Mission of the Immaculate Virgin, at Pleasant Plains, Staten Island, was awarded to DANIEL J. RYAN, 721 Third Ave., Brooklyn, N. Y. Cost, about $200,000.

The New England Construction Co., 124 West 47th St., New York, is taking bids on separate contracts for the construction of six 5-story flat buildings on 163d St., near Broadway. Cost, $300,000. Rouse & Sloan, 11 East 43d St., New York, are Archs.

An appropriation of $80,000 is asked by C. J. Bonaparte, Secy. War, for additions to the Army building, Whitehall St., New York.

BROOKLYN, N. Y.—It is reported that the Hamburg Savings Bank will erect a new bank and office building on Myrtle Ave. and Bleecker St., Brooklyn. James Moffett, 894 Broadway, Brooklyn, is Pres.

BUFFALO, N. Y.—Bids were opened for the construction of the 12-story hotel for E. M. Statler, at Washington and Swan Sts., Buffalo. Mosier & Summers, Buffalo, were low bidders at $509,960. Esenwein & Johnson, 777 Ellicott Square, Buffalo, are Archs.

Bids are asked by A. G. Hinkley, Clk., until 10.45 a. m., Feb. 20, for lighting fixtures, water heaters, pumps, steam appliances, steam fitting of boilers, engine pumps and heaters, feed water and heating connections and insulation (pipe covering) for the new 65th Regiment Armory at Buffalo, N. Y.

Bids are asked by A. G. Hinkley, Clk., until 10.45 a. m., Feb. 13, for concrete floor in Armory for 65th Regiment, Buffalo, N. Y.

ALBANY, N. Y.—Bids are asked by F. A. McNeely, Secy., until noon, Feb. 12, for the alterations to the steam heating and plumbing systems at the State Armory, Albany, N. Y.

NEW YORK, N. Y.—Plans are in progress for a 10-story apartment house for the Central Realty Co., Seventh Ave. and 57th St., New York, on Broadway and 101st St. Mulliken & Moeller, 7 West 38th St., New York, are Archs.

BROOKLYN, N. Y.—Bids were opened Feb. 5 for the construction of Public School No. 85, on Debevoise Ave., Boro. of Queens, as follows: Thomas Cockerill & Son, 147 Columbus Ave., New York, $244,000; P. J. Brennan, 1931 Broadway, New York, $248,700; Clarke & Stowe, 211 Greenpoint Ave., Brooklyn, $247,300; W. P. McGarry, 236 Huron St., Brooklyn, $238,849; George Hilderbrand, 38 Park Row, New York, $247,800; C. H. Peckworth, 415 Hudson St., New York, $246,974; P. J. Walsh, 503 Fifth Ave., New York, $250,000; P. Sullivan, 230 Grand St., New York, $256,000; A. Nugent & Son, 103 East 125th St., New York, $239,500.

TRENTON, N. J.—Bids were opened Feb. 1 by James Knox Taylor, Supervising Arch., Treasury Dept., Washington, for the installation of magnetic controller and safety elevator device on the elevator at Trenton, N. J., as follows: Otis Elevator Co., 17 Battery Place, New York, $2,130, time April 30; Marine Engine & Machine Co., 126 Liberty St., New York, $2,790, time May 1.

ATLANTIC CITY, N. J.—We are advised officially that John L. Young will construct a 6-story, fireproof, concrete and steel hotel in this city. Cost, $125,000. H. A. Stout, Bartlett Bldg., Atlantic City, is Arch.

PHILADELPHIA, PA.—Competitive plans are asked by C. H. Schermerhorn, Chn. Com., until Feb. 15, for a new building for the 40th St. Methodist Episcopal Church. Cost, $50,000.

PHILADELPHIA, PA.—The contract for erection of the warehouse at 1427 Vine St. for the Philadelphia Toilet & Laundry Co. was awarded to A. CHAMBLEY, 243 South Tenth St., Philadelphia. The new building will be six stories, brick, stone and steel, 55 × 175 ft.

LANCASTER, PA.—We are officially informed that competitive plans will be received until March 15 for the construction of the main building for the Thaddens Stevens Industrial School, at Lancaster, Pa. The cost of the building is not to exceed $60,000. Charles I. Landis is Pres.

We are informed that plans are in progress for a 4-story, fireproof, brick and stone office building for the Realty Co. D. M. Rothenberger, 140 North Queen St., Lancaster, Pa., is Arch.

Plans are in progress for a 4-story addition to St. Joseph's Hospital here. C. E. Urban, Lancaster, Pa., is Arch.

BLOOMSBURG, PA.—We are advised that plans are nearing completion for the construction of a Masonic Temple here. The new building will be three stories, brick and stone. Cost, $50,000. T. P. Reitmeyer, Williamsport, Pa., is Arch.

The contract for science hall for the Bloomsbury State Normal School has been awarded to BENNETT & WOODNUTT, Williamsport, Pa. Cost, about $75,000.

BANGOR, PA.—The Bangor Real Estate Co., of this city, has plans in progress for a new 5-story fireproof store and office building. Cost, $50,000.

BETHLEHEM, PA.—The contract for constructing the St. Bernard's Church was awarded to B. H. BERKEL, Bethlehem.

PITTSBURG, PA.—The contract for erecting synagogue for Rodeph Shalom Congregation was awarded to THOMAS REILLY, of Philadelphia, Pa. Palmer & Hornbostle, 63 William St., New York, are Archs.

WASHINGTON, D. C.—We are officially informed that about $1,250,000 will be expended for construction and alterations at the Soldiers' Home within the coming two years. A new mess hall is being erected at a cost of about $900,000; a central power plant, which, with its distributing system, will cost nearly $200,000; a guard-house for disciplinary purposes, which will cost about $50,000; and numerous additions, which will cost about $30,000. The work will be done by sub-contracts, bids for which will be advertised in the near future.

Bids are asked by Henry B. F. MacFarland, Chn. Board of Commissioners, until noon, Feb. 21, for construction of Public Convenience Station No. 1, and separate proposals for plumbing therein. (Advertised, Engineering News, 220 Broadway, New York.)

RICHMOND, VA.—It is reported that Col. John Murphy, of this city, will erect a new 10-story apartment house on Grace and Eighth Sts. Cost, about $200,000.

MOBILE, ALA.—We are informed that bids are being received by the Lyric Theater Co., of this city, for the construction of new theater. The new building is 80 × 120 ft. Cost, $60,000. Stone Bros., Cora Bldg., New Orleans, La., are Archs.

MEMPHIS, TENN.—Plans have been completed and bids have been asked for the construction of a $60,000 apartment house for Russell Martin, on Adam St., Memphis. Chighizola, Hauker & Cairns, Scimitar Bldg., Memphis, are Archs.

LEXINGTON, KY.—Bids have been received by the Union Station Co., of this city, for the new Union Station here. The new building will be two stories, fireproof, brick, stone and steel. No contracts awarded.

COLUMBUS, O.—It is stated that an appropriation of $500,000 has been asked for the proposed post-office building here.

CLEVELAND, O.—The CAREY CONSTRUCTION CO., Electric Bldg., has been awarded the contract for the $125,000, 5-story brick block to be erected at Sheriff and Prospect Sts. G. A. Tenbusch, Schofield Bldg., is Arch.

INDIANAPOLIS, IND.—Plans have been drawn by the American Engineering Co., of this city, for a coliseum here. A. F. Potts is interested.

It is stated that the Trustees of the Grand Lodge, I. O. O. F., of Indiana, will erect a $200,000 office building here. Benjamin Franklin, Indianapolis, is Chn. Com.

CADILLAC, MICH.—It is stated that the Supervisors of Wexford county are contemplating a $50,000 addition to the court-house here.

KALAMAZOO, MICH.—Plans have been completed for the erection of an 8-story building on Main and Burdick Sts., Kalamazoo. The new building will be fireproof, 66 × 120 ft., brick, stone and steel. Cost, $200,000. E. J. Phelps, Kalamazoo, is interested.

CHICAGO, ILL.—We are advised that plans are nearing completion for an apartment house at Leland and Winthrop Aves., Chicago, for J. S. Holmes, 112 Dearborn St. James Burns, 112 Clark St., Chicago, is Arch.

CHICAGO, ILL.—Bids have been received by D. H. Burnham & Co., Archs., 1417 Railway Exchange Bldg., for the construction of a 12-story addition to the store of Carson, Pirie & Co., at 145-153 State St., Chicago. The addition will be 105 × 144 ft., with foundations constructed so as to allow six additional stories to be added later. Cost, $900,000.

Plans are in progress for the Field Museum in Grant Park. The building will be in the form of a Greek temple, with Corinthian columns and surmounted by a large dome. The frame will be of steel, while the exterior construction will be New Hampshire granite. Estimated cost, $5,000,000. D. H. Burnham & Co., 1417 Railway Exchange Bldg., Chicago, are Archs.

Plans have been completed and bids are asked by Z. T. Davis, 1343 Unity Bldg., Chicago, for the construction of a 5-story mill construction warehouse in the Union Stock Yards. The new building will be 150 × 200 ft.

CHICAGO, ILL.—It is reported that the late contribution of $352,000 to the building fund of the Presbyterian Hospital, of this city, makes it possible to erect the proposed additional buildings.

MILWAUKEE, WIS.—We are advised that R. E. Schmidt, Arch., 172 Washington St., has been retained to prepare plans for the St. Mary Hospital here. The building will be five stories, fireproof, brick and stone, steam heat and electric light. Cost, $200,000.

MADISON, WIS.—We are officially informed that a competition is being arranged for an architectural competition for a new capitol building. The proposed building will cost about $4,500,000. L. F. Porter, Madison, Wis., is in charge of the competition.

DULUTH, MINN.—We are officially informed that a commission has been appointed to have in charge the construction of a $100,000 court-house here. E. K. Coe, Duluth, Minn., is City Engr. O. Holden is County Auditor.

BANCROFT, NEB.—We are officially informed that all bids received for the construction of school building here were in excess of the appropriation and were rejected.

SHERIDAN, WYO.—Bids are asked by Jas. S. Barker, Q. M., until 10 a. m., Feb. 27, for construction, plumbing, heating and electric wiring of a brick hospital at Fort Mackenzie, Wyo.

ST. LOUIS, MO.—The Jefferson Bank has secured a site on which to erect a new 7-story fireproof bank and office building, at a cost of $250,000.

It is reported that the Liederkranz Club, of St. Louis, is having plans prepared for a new $100,000 building.

COLORADO SPRINGS, COLO.—Bids were opened Feb. 1, Supervising Arch., Treasury Dept., Washington, for the construction of the post-office and court-house at Colorado Springs, Colo., as follows: J. H. Wiese, South Omaha, Neb., original specifications, $116,927, time October 1, 1907; original specifications, granite instead of sandstone or limestone, $127,367; revised specifications, granite, $138,927; time in last two bids, Dec. 1, 1907. Wm. Weber, Huntington, W. Va., original specifications, $112,800; light Colorado granite instead of limestone and sandstone, $137,000; revised specifications, granite, $147,000; time as specified.

SAN FRANCISCO, CAL.—It is reported that Mrs. Addison E. Head, of this city, will erect a 14-story building on the corner of Post St. and Grant Ave., San Francisco, Cal. Cost, $600,000.

WATER SUPPLY—IRRIGATION.

The names of parties awarded contracts are printed in capital letters.

PORTLAND, ME.—Bids are asked until 11 a. m., Feb. 26, for extension of a water main at Fort Williams, Me. Capt. A. W. Yates, Q. M., 187 Middle St., Portland.

STOCKTON SPRINGS, ME.—We are officially informed that the water system for this town, to be built by the Stockton Springs Water Co., will consist of about five miles of cast iron pipe, six miles of riveted steel pipe and a 400,000-gallon reservoir. Charles N. Taylor, Wellesley, Mass., is Engr.-in-Charge.

ALBANY, N. Y.—According to official advices, the contract for the construction of an addition to Rochester State Hospital has been awarded to the R. T. FORD CO., Rochester. Bids were opened Jan. 17.

PERTH AMBOY, N. J.—M. J. Drummond was lowest bidder for furnishing pipe at $28.10 per ton, and H. V. Oliver & Co., New Brunswick, were lowest bidders for laying same at 33 cts. per ft. [illegible] were opened Jan. 24. Adam Eckert is [illegible] Bd. Water Comrs.

ATLANTIC CITY, N. J. [illegible] are officially informed that the install[illegible] of two 200-HP. boilers for the Absecon [illegible]mping station is under consideration [illegible]ter commission. L. Van Gilder is Engr. [illegible] Supt.

TRENTON, N. J.—Water [illegible]mmission has decided to spend $100,000 [illegible] increase the pumping capacity of the p[illegible] at the Delaware River. C. C. Haven is [illegible] Engr.

CHATHAM, VA.—This cl[illegible] put in additional water-works, acco[illegible] to official information. O. B. Yeatts [illegible].

PORTSMOUTH, VA.—W[illegible] Davis, Supt. Portsmouth, Berkley & Su[illegible] Water Co., has stated that the compa[illegible] will begin the construction of a filtration [illegible] at once.

FRANKLIN, VA.—Charl[illegible] York, Baltimore, Md., is Engr. for t[illegible] proposed municipal water-works, we [illegible] officially informed. Noted on Jan. 11. T. Pace is Recorder.

WHEELING, W. VA.—In [illegible]section with water-works extensions, no[illegible] on Jan. 27, Wilson Hoge was erroneous[illegible] mentioned as City Engineer. We are infor[illegible] that C. B. Cook is present City Engr.

RALEIGH, N. C.—City is [illegible]idering the purchase of the water-work[illegible] plant of the Wake Water Co. or construc[illegible] new plant. J. I. Johnson is Mayor.

DUBLIN, GA.—It is stated [illegible] the water-works of this city are to be [illegible]extended and improved under the supervision of Arthur P. Pew, Engr., of Atlanta, Ga.

TAMPA, FLA.—It is reported that city is considering the issuance of $[illegible] of bonds for the purchase of local water works plant and $100,000 for equipping and maintaining a lighting plant in the Tampa Bay Hotel grounds.

GAINESVILLE, FLA.—In connection with water-works extension, noted Jan. 11, we are officially informed that city will require about 4,000 ft. of 4-in. pipe, the balance of the work to be done by the city. G. K. Broome is Pres. Council.

BRUNDIDGE, ALA.—It is proposed by the city to construct water-works, and probably $12,000 will be the extent of the expenditure, according to reports.

DONALDSONVILLE, LA.—Plans and specifications have been prepared for a water system in this city at an estimated cost of about $31,000. Bids will be asked in a short time.

NASHVILLE, TENN.—W. W. Southgate, City Engr., is surveying for the location of a reservoir for a projected gravity water supply.

LORAIN, O.—Bids are asked until Feb. 12 for furnishing 120 tons of 6-in. cast iron pipe and 1½ tons of special castings. Gustav Snyder, Clk. Bd. Pub. Service.

CINCINNATI, O.—See under Light and Power Plants.

LAFAYETTE, IND.—See under Light and Power Plants.

INDIANAPOLIS, IND.—We are advised officially, that the Indianapolis Water Co. has awarded a contract to the U. S. CAST IRON PIPE & FOUNDRY CO., 71 Broadway, New York, for about 40,000 ft. of various sized pipe, at $27.38 per ton. F. A. W. Davis is Pres. Noted on Jan. 18.

LAWRENCE, IND.—Specifications are on file at office of Engineering News, New York, for construction of a water system at this place. Bids are asked until Feb. 24, as noted on Feb. 1.

SAGINAW, MICH.—It is reported that favorable action will be taken on the report of George W. Fuller, Engr., for construction of a consolidated water station and filter plant. Noted fully on Jan. 11.

LANSING, MICH.—We are officially advised that city will construct a sub-pumping station, in which will be installed pumps of about 2,000,000-gallon capacity and motor for same. Bids for this equipment will not be asked before April 1. C. D. Dodge is Supt.

GROSSE POINTE, MICH.—The town of Grosse Pointe has voted to issue $10,000 of bonds for the purpose of extending its system of water-works, purchasing and laying mains, etc.

AMES, IA.—City has sold its water-works bonds and concluded the contract with the DES MOINES BRIDGE & IRON CO., Des Moines, Ia., for a $31,000 extension of its water-works system, consisting of a 60,000-gallon elevated steel tank, 100,000-gallon concrete reservoir, a new well and electric deep well pump, a new fire pump, and about five miles of mains.

ST. PAUL, MINN.—The CRANE & ORDWAY CO. has been awarded the contract for supplying cast iron pipe for the year 1908 at $28.80 per ton for 8, 12, 16 and 20-in., and $30.35 per ton for 4 and 6-in.

ATWOOD, KAN.—Council has awarded a contract for construction of a water-works system to J. L. WHITE & CO., Sioux Falls, S. Dak.

TOBIAS, NEB.—Town has awarded a contract to the NATIONAL CONSTRUCTION CO. to build a water-works system.

LINCOLN, NEB.—The following bids were opened Jan. 27 for furnishing two high-pressure turbine pumps with motors as follows: Byron Jackson Co., two pumps, weight 6,500 lbs. price $1,580; Henry R. Worthington Co., 118 Liberty St., New York, two pumps with two 220 volt electric motors, Westinghouse manufacture, $3,883. Alternate bid, two pumps alone, $1,281. General Electric Co., Schenectady, New York, two 4,400 volt motors, 50 HP. each, price $1,801.

BENSON, NEB.—Bids are asked until 3 p. m., Feb. 17, for material and construction of a water-works system. Joseph McGuire, Chn. Frank S. King, Village Clk.

EDGEMONT, S. DAK.—Samuel S. Thompson and associates have been granted a 20-year franchise for constructing and operating a water-works system at this place.

ST. LOUIS, MO.—Bids were opened Jan. 26 for laying water pipes and plugs on two contracts. The Prendergast Contracting Co. was lowest bidder on both contracts at $30,234 and $36,875.

BROWNWOOD, TEX.—City is preparing to let contract for construction of a dam in connection with water-works system as soon as site is determined.

SHERMAN, TEX.—We are officially advised that the proposition to construct a reservoir at the pumping station at Sherman has been abandoned for the present on account of the cost, and the city's lack of funds with which to do it. Noted on Jan. 11. Charles E. Haydon is City Engr.

ROFF, IND. T.—We are officially advised that city has awarded a contract to the O'NEIL ENGINEERING CO., of Dallas, Tex., for the design and construction of a complete water-works system, to cost $25,000. Artesian wells will be used; there will be seven miles of 4-in., 6-in., 8-in., and 10-in. cast-iron pipe, 40 fire hydrants, 36 valves, two air compressors, two 750,000-gallon duplex pumps, two boilers, brick power house, and all usual equipments, including hose and reels. Dates for the opening of the bids of O'Neil Engineering Co., for the purchase of material for this work, will be in the columns of the Engineering News in a future issue.

STROUD, OKLA.—City has voted in favor of the proposed $4,000 bond issue for electric light plant and $18,000 for water-works, it is stated. James P. Freshour is City Clk.

HOLYOKE, COLO.—Bids are asked until Feb. 12 for the purchase of $8,500 of water-works bonds. W. G. Helland, Town Clk.

WAITSBURG, WASH.—It is stated that council has approved contract submitted by the CALIFORNIA JEWEL FILTERING CO. for filtering plant, costing $5,000, including cost of work done by city. Plant alone costs $4,500.

SEATTLE, WASH.—We are officially advised that contract was awarded Jan. 31 to McINNIS & HARRINGTON, Seattle, Wash., for construction of 150,000-gallon steel tank and trestle at Fort Lawton, Wash., for $13,300.

HILLYARD, WASH.—The Great Northern Railway has decided to install a pumping plant at the river and lay water main to supply the Hillyard shops. 7,000 ft. of 8-in. wrought iron pipe will be required. Cost of system is estimated at about $10,000. A. Stewart is Asst. Ch. Engr., at Seattle, Wash.

MERRILL, ORE.—An ordinance has passed providing for the sale of $5,000 of bonds for the purpose of installing a water system at this place. G. W. Jory is Pres. Bd. Trustees.

OREGON CITY, ORE.—It is reported that a 10-in. main will be placed near Third St., at an estimated cost of $7,000. W. H. Howell is Supt. Water Comn.

SACRAMENTO, CAL.—The construction of a filtration plant is under discussion by city trustees. An estimate of $200,000 for a 10,000,000-gallon plant has been submitted.

PETERBORO, ONT.—Allan Hazen, Engr., 220 Broadway, New York, has presented a report to the water commissioners recommending the installation of a sand filter costing $80,000.

FORT WILLIAM, ONT.—$20,000 have been voted for improvements to the water system.

PORT ARTHUR, ONT.—A by-law has been passed authorizing the expenditure of $112,000 on the extension of the water-works, and $111,000 for the extension of sewers.

FORT FRANCES, ONT.—John Galt, Engr., will prepare plans and specifications for a water-works system in this town.

GUELPH, ONT.—Council has awarded a contract to the ROBERTS MFG. CO. for the installation of a filtration plant, at a cost of $20,000, including buildings.

WINNIPEG, MAN.—Contract has been awarded to JACKSON & CO., of Glasgow, Scotland, for the engines and pumps of the new high pressure water plant, the price being $237,578.

SEWERAGE.

The names of parties awarded contracts are printed in capital letters.

BOSTON, MASS.—We are officially advised that the contract for constructing a sewer in private land between Don and Lyons Sts., Dorchester, has been awarded to the HUGH NAWN CONSTRUCTION CO., 13 Avon St., Boston, at $17,496.

MARION, MASS.—Bids are asked until 8 p. m., Feb. 13, by the selectmen of Marion for the following separate contracts: 1. Trenching and laying 17,500 ft. of vitrified sewer pipe from 6 to 12 in., with appurtenances. 2. Building two small covered concrete reservoirs. 3. Building intermittent sand filter, total area 1 acre. 4. Furnishing and erecting two sets of pumping machinery, each consisting of a small, vertical, submerged, centrifugal pump and a gasoline engine of about 3 HP. Freeman C. Coffin and Lewis D. Thorpe, 53 State St., Boston, Mass., Engrs.

SHARON, CONN.—Bids are asked by Willard Baker, Pres. Sharon Drainage Co., until 2 p. m., Feb. 16, for the construction of a concrete septic tank and gate chamber and two sand filter beds and one sludge bed, and main and lateral sanitary sewers. T. H. McKenzie, Constr. Engr.

BUFFALO, N. Y.—Bids are asked until Feb. 15 for constructing 18, 15 and 12-in. tile sewers in various streets. Francis G. Ward, Comr. Dept. Pub. Works.

ROCHESTER, N. Y.—It is reported that a contract has been awarded to HORACE N. COWLES, 47 Tacoma St., for constructing a sewer in several streets at $9,96?.

ROCHESTER, N. Y.—Thomas Holahan submitted the lowest bid on the construction of the Court and William St. outlet sewer at $50,875. Edwin A. Fisher is City Engr.

READING, PA.—We are officially advised that the following bids were opened Feb. 1 for the construction of sewers in house sewer dist. 13: Hawman Bros., Reading, $45,262; Fehr & O'Rourke, Reading, $50,961; David Peoples, Philadelphia, $46,384; Hauman Construction Co., Reading, $35,886. C. C. Weltmer is City Clk.

PHILADELPHIA, PA.—We are officially advised that the contract for reinforced concrete sewer work in Market St. has been awarded by the Philadelphia Rapid Transit Co. to JOHN McMENAMY, Harrison Bldg., Philadelphia. William S. Twining is Ch. Engr.

BRIDGEPORT, PA.—Council contemplates employment of an engineer to prepare plans for a sewer system of about 14 miles, costing $150,000. P. J. Dillon may be addressed.

LAKE CITY, S. C.—Town is considering the construction of a sewer system at an estimated cost of $20,000.

GAINESVILLE, FLA.—Bids are asked until 3 p. m., March 7, for constructing a sanitary sewer system. Bids opened Jan. 25 were all rejected, we are informed. Specifications are on file at office of Engineering News. W. W. Hampton, Secy. Bd. Pub. Works. (Advertised, Engineering News.)

BESSEMER, ALA.—It is reported that the contract for sewers in this city has been awarded to SULLIVAN & LONG, of this city, conditioned on amount and character of work required. C. T. Cooke is City Clk.

ST. PETERSBURG, FLA.—Bids are asked until Feb. 15 for constructing an extension to the sewer system of about 20,000 ft. John F. Ridlon, City Clk.

CLEVELAND, O.—Bids are asked until Feb. 8 for constructing sewers in several streets. A. R. Callow, Secy. Bd. Pub. Service.

Bids are asked until noon, Feb. 13, for constructing sewers in various streets. A. R. Callow, Secy. Bd. Pub. Service.

CLEVELAND, O.—The following bids are reported to have been opened Jan. 23 for sewers in 30th St.: Beers & Doolittle, $45,023; James Duff Construction Co., $47,494; M. F. Condon, $47,926; C. Burkhardt, $48,263; J. Connolly Construction Co., $48,864; A. F. Helm, $49,257; William Lehman, $49,780; R. F. Burnett, $51,528; Northern Ohio Paving Co., $60,055; A. Wagner, $71,388.

AKRON, O.—The contract for constructing the South Akron sanitary sewer has been awarded to HALLIMAN BROS., at $31,552. J. W. Payne is City Engr.

TOLEDO, O.—The council proposes to establish a sewer disposal plant for the city hospital, it is reported. Frank I. Consaul is Ch. Engr. Bd. Pub. Service.

CINCINNATI, O.—A resolution has been passed to construct sewers in Townsend St., at an estimated cost of about $4,000. Edward Henderson is City Clk.

ELYRIA, O.—It is proposed to erect a trunk sewer in East River St. and a sewage disposal plant at the end of the same.

LAWRENCE, IND.—Specifications are on file at office of Engineering News, New York, for construction of a sewer system at this place. Bids are asked until Feb. 24, as noted on Feb. 1.

HAMTRAMCK (post-office, Detroit), MICH.—Town has voted in favor of installing a system of three trunk sewers at an estimated cost of $60,000.

ST. CLAIR HEIGHTS, MICH.—JOHN MERCIER has been awarded the contract for building a sewer in this village for $12,000.

DECATUR, ILL.—A brick sewer will be built in 7th St., to cost about $113,000. It will be about three miles long. Bids will not be asked until April. A. B. Alexander is City Engr.

MOLINE, ILL.—Clark G. Anderson, City Engr., has prepared estimates for a sewer system in the Fifth Ward, costing about $38,000, it is reported.

CAIRO, ILL.—Board of local improvements has instructed Wilbur Thistlewood, City Engr., to prepare estimates for construction of a main outlet sewer in Commercial Ave.

GREEN BAY, WIS.—We are officially informed that bids will be asked about March 25 for constructing 4,400 ft. of brick and 4,000 ft. of pipe sewers, 36 to 42 inches in diameter. W. W. Read is City Engr.

DES MOINES, IA.—According to official advices, the contract for constructing a 12-in. sewer in East Fourth St. was awarded to the KING LAMBERT CONSTRUCTION CO., this city; and for a 15-in. sewer in West Ninth St. to W. F. COOK, of this city. W. W. Wise is Chn. Bd. Pub. Wks.

C. H. Beuck, Asst. City Engr., will prepare plans for an extension of the 14th Dist. sewer to furnish laterals to the northwest section of the city.

AMES, IA.—City has awarded a contract to R. C. DE LA HUNT, of Cedar Rapids, Ia., for the construction of about 3½ miles of sanitary sewers.

CARROLL, IA.—City has had plans prepared for a sewer system and will advertise for bids early in the spring. There probably will be between two and three miles of sewers constructed.

FAIRMONT, MINN.—Official reports state that the following bids were received Jan. 29 for constructing a sewage disposal plant, noted on Jan. 11: O'Niel & Son, Faribault, Minn., $16,960; J. W. Turner, Des Moines, Ia., $13,933; W. E. Young, Blue Earth, Minn., $17,597; D. D. Lovell, Minneapolis, Minn., $17,870; W. C. Frasier, Rochester, Minn., $17,377; Des Moines Bridge & Iron Co., Des Moines, Ia., $17,889. For constructing tanks and beds alone: M. Tachiryi, Dubuque, Ia., $5,400; Fred Franzwa, Carroll, Ia., $5,765. E. L. Lewis is City Clk.

McCOOK, NEB.—The council has called an election for Feb. 24 to vote upon bonds in the sum of $10,000 to provide a main sewer for the sewer system of this city.

ABERDEEN, S. DAK.—City has had a report from Professor A. Marston, of Ames, Ia., on the local sewage disposal problem, and is considering the holding of an election on the question of issuance of bonds for constructing a sewage disposal plant and improving the sewage pumping station.

FORT ASSINNIBOINE, MONT.—Plans specifications and bidding sheets are on file at office of Engineering News, New York, for the construction of a bacterial sewage purification plant. Bids are asked until Feb. 19, as advertised in Engineering News.

GALVESTON, TEX.—Bids are asked until Feb. 15 for constructing vitrified pipe sewers in several streets. John D. Kelly, City Secy.

TACOMA, WASH.—Bids are asked until 11 a. m., Feb. 10, for construction of a sewer in the Alliance Addition, local improvement dist. No. 15. William Welsh, Comr. Pub. Works.

TACOMA, WASH.—THE TACOMA TRADING CO. has been awarded a contract for 14,708 ft. of sewer pipe and 100 bbls. of cement, at $29,305.

SEATTLE, WASH.—The contract for constructing sewers in Mercer St. has been awarded to T. RYAN, at a contract price of $8,436.

SPOKANE, WASH.—JAMES C. BROAD has been awarded a contract for a sewer in Fifth Ave. and Pine St., at $3,265.

BALLARD, WASH.—We are officially informed that a contract has been awarded to H. DAHLSTROM for constructing a sewer in Post and Folk Sts., at $3,956. H. T. Bostian is City Engr.

NORTH YAKIMA, WASH.—We are officially advised that the contract for a main trunk sewer has been awarded to PATRICK MULLINS, of this city. Bonds for $48,000 for this work were sold Jan. 15. J. C. Brooker is City Clk.

PENDLETON, ORE.—A sewer in West Court St. is projected to cost about $8,000, and council will take action shortly.

BLACK DIAMOND, CAL.—Bids are asked until 8 p. m., Feb. 13, for constructing a sanitary sewer system. W. H. Buchanan, Pres. Bd. Trustees.

LOS ANGELES, CAL.—Local press reports state that council will call an election to vote on issuance of $750,000 of bonds for bridges, storm drains and lateral sewers to connect the internal sewer system with the new outfall. H. F. Stafford is City Engr.

BERKELEY, CAL.—Bids are asked until Feb. 12 for the construction of a 6-in. sewer. C. S. Merrill, Town Clk.

LOS ANGELES, CAL.—A special election will be called to vote on the issuance of bonds as follows: $287,620, sewers; $219,500, storm drains; $275,000, bridges.

PORT ARTHUR, ONT.—See under Water Supply.

GARBAGE DISPOSAL.

The names of parties awarded contracts are printed in capital letters.

MACON, GA.—City is considering building a trash crematory if proper site can be purchased. J. W. Wilcox is City Engr.

CINCINNATI, O.—W. S. Marx, Pres. Bd. Pub. Service, is investigating matter of municipal garbage crematory for this city.

SEATTLE, WASH.—An ordinance, appropriating $30,000 to start construction of a garbage crematory, has been presented to council. R. H. Thomson is City Engr.

STOCKTON, CAL.—Bond Commission has recommended the expenditure of $20,000 for a garbage destructor. R. C. Tumelty is City Engr.

SANTA MONICA, CAL.—Bids are asked until 8 p. m., Feb. 12, for the installation of a complete plant capable of consuming ten tons of garbage per day. J. C. Hemingway, Pres. Bd. Trustees.

ALBUQUERQUE, N. MEX.—The city has decided to erect a crematory on the outskirts of the city for the disposition of garbage. It will cost $15,000. Pitt Ross is City Engr.

STREETS AND ROADS.

The names of parties awarded contracts are printed in capital letters.

BUFFALO, N. Y.—The Barber Asphalt Paving Co., Land Title Bldg., Philadelphia, Pa., was lowest bidder for paving a section of Perry St. at $9,360 and for a section of Court St. at $3,753. Henry P. Burgard was lowest bidder for repaving a section of Allen St. at $4,400.

It is stated that separate bids are asked until Feb. 15 for repaving portions of six streets. Francis G. Ward, Comr. Dept. Pub. Works.

NEW YORK, N. Y.—Bids are asked until 11 a. m., Feb. 14, for repairing and maintaining asphalt pavements in various streets in Borough of Brooklyn. Bird S. Coler, Boro. Pres.

SYRACUSE, N. Y.—It is stated that the following paving contracts have been awarded by Board of Contract and Supply: Park Ave. with asphalt, to the WARNER-QUINLAN ASPHALT CO., 207 South State St., this city, at $8,656; Highland Ave. with asphalt, to T. J. BAKER, at $7,357; Tully St. with asphalt, to the CENTRAL CITY PAVING CO., Kirk Bldg., this city, at $20,071; and Leavenworth Ave., with brick to T. MARRELL, 228 West Belden Ave., this city, at $1,849.

NIAGARA FALLS, N. Y.—W. W. Read, City Engr., has prepared estimates for paving work on three streets at $32,275.

ALBANY, N. Y.—Council is contemplating paving Western Ave. with macadam, from the Manning Boulevard to the city line.

PEEKSKILL, N. Y.—Bids are asked by S. Allen Mead, Town Clk., until noon, March 15, for constructing 2.18 miles of telford and macadam road, in the town of Cortlandt. (Advertised, Engineering News.)

OSWEGO, N. Y.—Bids will soon be asked for 1,000 sq. yds. of brick paving and 250 sq. yds. Belgian block paving, in this city.

CLARION, PA.—We are officially informed that the Borough of Clarion proposes to pave Main St. for a distance of 3,000 ft. with brick. The width will be 45 ft. with native sandstone curb. Fred. V. Brown is City Engr.

WILMINGTON, DEL.—Extensive repairs are reported to be made on New Castle causeway, where it enters Wilmington. It is proposed to build a macadam road 20 ft. wide, at the present grade, at a cost of $1,000. M. Boughman is City Engr.

BALTIMORE, MD.—It is stated that August E. Christhilf, Engr. Annex Improvement Comn., has submitted estimates as follows for paving a portion of York Road: Macadam, $37,184; Belgian block, $73,274; sheet asphalt, $69,453; bitulithic, $67,410.

WASHINGTON, D. C.—The Department of Agriculture has agreed to construct one mile of model road each in Washington, Oregon, Idaho, Montana, North and South Dakota, and Minnesota, provided the co-operation of the State or county authorities can be secured. It is proposed to do the work next summer, the federal government providing the necessary machinery for the purpose and expert road makers to supervise construction.

NORFOLK, VA.—Council is considering extension of Boush St., the paving of which will cost about $5,000. W. T. Brooke is City Engr.

CLARKSVILLE, GA.—City will macadamize main street its entire length, 1½ miles, and plans and bids for the work will be received by Robert McMillan, Chn. Com.

ST. PETERSBURG, FLA.—City has awarded contract to H. WALTER FULLER, of Bradentown, Fla., for brick paving at $15,996, and H. H. SCARLET, of Tampa, Fla., at about $5,000 for grading streets, for which bonds were recently voted.

JACKSONVILLE, FLA.—The contract for paving a section of King St. with vitrified brick has been awarded to JOHN N. C. STOCKTON, at $1.49 per sq. yd. Philip Prioleau is City Engr.

SHREVEPORT, LA.—Bids are asked by C. G. Rives, Comptroller, until 7 p. m., Feb. 13, for paving Herndon Ave., Buckner, Dashiel and Mildred Sts.

MERIDIAN, MISS.—A resolution has been adopted for the macadamizing the principal streets of this city. $100,000 of bonds will be issued.

JACKSON, MISS.—A bill has been introduced in the state legislature authorizing the issuance of $250,000 of paving bonds and another bill providing for the state to pave around the Capitol. A petition has also been made to the board of aldermen to pave North State St. It is stated that at the next meeting of the board, an ordinance will be passed providing for this and other paving. Ramsey Wharton is Mayor.

MEMPHIS, TENN.—Bids will soon be asked for building five miles of permanent streets in this city. James A. Omberg, Jr., is City Engr.

PORTSMOUTH, O.—Council, it is stated, has voted to pave portions of six streets. Benjamin Bratt is City Engr.

CLEVELAND, O.—It is reported that the contract for completing the North Woodland Road was awarded to SPENCE BROS., 2923 Euclid Ave., Cleveland.

FORT WAYNE, IND.—Plans are in progress for paving Wallace St., from Calhoun to Smith St. L. M. Randall is City Engr.

TERRE HAUTE, IND.—Specifications are being prepared for paving a number of streets. W. S. Kidder is City Engr.

WINCHESTER, IND.—Council has awarded contract for paving several streets with metropolitan brick to MOORMAN & GOODRICH, of this city, at approximately $60,800. Noted on Jan. 11.

DETROIT, MICH.—The following bids are reported to have been received for paving the roadway of Belle Isle bridge: W. W. Hatch & Son, three bids from $30,132 to $34,864; The United States Wood Preserving Co., $34,289; Russell & Jennison, $41,672; Vinton & Co., $32,370; Julius Porath, $27,950; Thos. E. Currie, $27,000.

CHICAGO, ILL.—John Erickson, City Engr., has estimated the cost of vitrified brick paving to be constructed in this city in 1906 at $225,467.

JOLIET, ILL.—The R. F. Conway Co. was lowest bidder for paving two streets with asphalt, bids opened Jan. 29, at $2.10 per sq. yd.

OSKALOOSA, IA.—Bids are asked until 8 p. m., Feb. 12, for paving about 3,000 sq. yds. with brick. Richard Burke, City Clk.

DULUTH, MINN.—We are officially informed that specifications will be prepared for paving several streets with various materials during 1906 at an estimated maximum cost of $127,000. Thomas F. McGilvray is City Engr.

CROOKSTON, MINN.—It is stated that bids are asked until March 13 for paving a section of Houston Ave. with asphalt. J. E. Carroll, City Engr.

GREAT FALLS, MONT.—Bids are asked, it is reported, until 8 p. m., Feb. 19, for repaving a portion of Central Ave. W. P. Wren, City Clk.

HELENA, MONT.—It is stated that the estimated cost of the proposed west side improvements, including grading, curbing, sidewalk work, etc., is $86,637. C. W. Helmick is City Engr.

FARGO, N. DAK.—Plans and specifications will be prepared for paving a number of streets with creosote blocks on concrete base at an estimated cost of $168,000. This amount does not include the pavement of Broadway noted on Jan. 18.

PORTLAND, ORE.—Council has passed resolutions providing for the repaving of several streets at an estimated cost of $12,650. Charles Wanzer is City Engr.

LEAVENWORTH, WASH.—Bids are asked by the county commissioner until April 2 for clearing, grubbing, grading and surfacing state road No. 3. Noted Jan. 25, under Wenatchee, Wash.

SEATTLE, WASH.—The contract for the grading of Olympic Way, at a contract price of $4,878, has been awarded to A. C. GOERIG.

A majority petition has been presented to the council for the regrading of Pine St., at an estimated cost of $82,000. R. H. Thomson is City Engr.

MORGAN HILL, CAL.—The contract for macadamizing Monterey Road has been awarded to the GRANITE ROCK CO., at $3,990.

SAN FRANCISCO, CAL.—A contract has been awarded to WILLIAMS & BELSER for repaving a portion of Mission St. with basalt blocks at $10,410.

Bids will be asked shortly for paving a section of California St. with bitumen.

SAN FRANCISCO, CAL.—Board of works is considering the paving of Ellis St. at an estimated cost of $27,000. Thomas P. Woodward is City Engr.

STOCKTON, CAL.—The bond commission, it is stated, has recommended the issuance of $150,000 of bonds for asphalt paving and $100,000 for macadam and gravel streets. R. C. Tumelty is City Engr.

MANUFACTURING PLANTS.

The names of parties awarded contracts are printed in capital letters.

WARE, MASS.—Plans are in progress for a new factory for the West Ware Paper Co., of this city. Ellsworth & Kirkpatrick, 18 Dwight St., Holyoke, Mass., are Archs.

BUFFALO, N. Y.—We are informed that plans are in progress for an automobile factory for George N. Pierce Co., on Elmwood Ave., Buffalo. Lockwood, Green & Co., 93 Federal St., Boston, Mass., are Engrs.

SYRACUSE, N. Y.—It is reported that the H. H. Franklin Co. will erect a new factory building, 100 × 600 ft., on Geddes St., Syracuse.

PERRYOPOLIS, PA.—We are officially advised that plans will be ready for bids about Nov. 1 for the construction of the new brick plant for the Perry Manufacturing Co. F. M. Wilson, Pittsburg, Pa., is Arch. J. F. Torrence, New Haven, Pa., is Secy.

TRAFFORD CITY, PA.—Plans have been completed for the erection of a copper mill for the Atlas Brass & Copper Mill Co., of Pittsburg, at Trafford City. Copper tubing will be the principal product.

PHILADELPHIA, PA.—The contract for erecting the 5-story brick factory at 924-26-28 Cherry St., for W. H. Deisroth, was awarded to A. BECK, 13th and Cherry Sts., Philadelphia.

We are officially informed that plans are in progress for a 4-story brick factory building at Berks and Mascher Sts., Philadelphia, for the Walker Manufacturing Co. Stearns & Castor, Stephen Girard Bldg., Philadelphia, are Archs.

PHILADELPHIA, PA.—The contract for additions to the factory of Thomas R. Stevenson & Co., at Second and Mifflin Sts., was awarded to HENRY C. DAHL, 241 South Sixth St., Philadelphia. The addition will be three stories, 40 × 120 ft.

The contract for the 4-story addition to the factory of H. Holmes & Sons, on Trenton Ave. and William St., Philadelphia, was awarded to CRAMP & CO., Commonwealth Bldg., Philadelphia.

BALTIMORE, MD.—We are advised that the Dixie Manufacturing Co., 401 North St., Baltimore, will erect a new building, 84 × 155 ft., on Russell St., for the manufacture of blow-piping and dust collectors. James W. Toohey, 401 North St., is interested.

It is reported that the S. B. Sexton Stove & Manufacturing Co., 7 South Gay St., Baltimore, will build two additional buildings to its plant on West Conway St.

BALTIMORE, MD.—We are officially informed that Bartlett, Hayward & Co., of this city, will make extensive improvements to their foundry and machine shop, and are in the open market for such equipment. F. H. Wagner is Engr.

LYNCHBURG, VA.—We are officially advised that plans are nearing completion and will be ready for bids about March 1, for the factory building for the Craddock-Terry Co., here. The new building will be four stories and basement, 50 × 250 ft. It will contain complete mechanical plant for the manufacture of men's shoes. Steam boilers, direct connecting engines and dynamos will be installed. There will be an annex, 50 × 130 ft., three stories and basement with sprinkler system and tanks. E. G. Frye, Lynchburg, Va., is Arch.

LOUISBURG, N. C.—Plans have been completed for an addition, 100 × 40 × 20 ft., to the Louisburg Plow Co.'s plant. E. L. Harris, Louisburg, is Arch. N. Mosley, Louisburg, is Engr.

FAYETTEVILLE, N. C.—It is reported that the Raleigh & Southport Railway Co. is considering erecting shops on the recently purchased property in this place. F. T. Ricks, Raleigh, N. C., is Secy.

MONTGOMERY, ALA.—The Apperson interests here have plans out for the construction of a large car house which will house eighty 40-ft. cars and will cost $200,000. It is also proposed to place orders soon for the repair shop equipment, to consist of lathes, wheel press, boring mill and other tools.

BIRMINGHAM, ALA.—It is reported that a company is being organized here for the purpose of establishing a plant to manufacture iron beds. James Babb, Commercial Club, Birmingham, is interested.

CHATTANOOGA, TENN.—It is reported that a large plant will be erected here by the Forster Pulley Works, of Cuba, N. Y. George L. Estes, Cuba, N. Y., is interested.

READERS' WANTS FOR THOSE IN THE MARKET

The readers of ENGINEERING NEWS are constantly in the market for great quantities of machinery, tools and general supplies. While our thousand advertisers are usually able to furnish the material desired, yet there are many things wanted by our readers that are not advertised, although connected with engineering and contracting directly or indirectly. This department (R-W) is for this class of inquiries, and we urge our readers to keep us informed. Enclose five cents in stamps and we write to a number of leading manufacturers without further cost. When writing to our advertisers, who are the leaders in their respective lines, **mention Engineering News.** Have you a copy of our Buyers' Guide? **Engineering News Can Help Buyers.**

PRESS CLIPPING BUREAUS.—Easton, Pa.—The Ingersoll-Rand Co., Publication Dept., writes us for the names of press clipping bureaus.

PNEUMATIC TUBES.—Cuba.—J. F. Adams, Eng. Co. Calle de Cuba 76, Havana, Cuba, writes us that it is in the market for pneumatic tubes such as are used in post-offices.

SAND PUMPS AND PIPING.—Fort White, Fla.—A. L. Taveau, of Ft. White, writes us that he wants two 8-in. sand pumps, geared to engine on same bed, and 400 ft. of 8-in. piping.

CONVEYOR.—Ashland, Ky.—The Ashland Fire Brick Co. writes us that it is in the market for about 100 ft. of conveyor for conveying ground clay from the grinding machine to the cars.

MACHINERY FOR PREPARING PULP AND MAKING PAPER.—San Francisco, Cal.—H. A. Noble, C. E., 418 California St., writes us that he wants catalogues from firms making machinery for the above.

GARBAGE DISPOSAL PLANTS.—Philadelphia, Pa.—John O'Rourke, contractor, 903 North 48th St., writes us that he wants to know the names of patent holders of garbage crematories and incinerating plants.

FIRE ALARM SYSTEM, FIRE FIGHTING APPARATUS, ETC.—Kendallville, Ind.—Jas. Graves, Mayor, writes us that the city will probably be in the market for a fire alarm system, hose wagon, hose nozzles, extinguishers, ladders, etc.

CORK BARK GRINDING MACHINERY.—Baltimore, Md.—C. M. Anderson, Arch., is about to erect a building for the purpose of grinding cork bark, and wishes information regarding machinery, etc., for the same, and especially desires data about methods for preventing explosions from the accumulation of dust.

THE JAPANESE GOVERNMENT is reported by U. S. Consul-General Miller, of Yokohama, as planning through the various commercial bodies considerable new work both for construction and for developing methods of increasing business.—Matters Relating to Foreign Trade: 1. Extending and completing works on custom-houses, and improvements in treaty ports. 2. Establishment of commercial and industrial commissioners' offices in the most important foreign ports. 3. Improvements in and extension of consular service urged. 4. Improvements in the present method of sending trade industrial students to foreign countries urged. 5. To establish the service of cruising floating museum, and commercial museum, and bazaars or sample halls at the important foreign ports most likely to be our new customers. 6. To abolish the conventional tariff. 7. To make customs alliance with Korea. 8. Early conclusion of a better commercial treaty than the previous one with Russia. 9. Lowering the import duty on raw materials.—Matters Relating to Manufacturing Industry: 1. Encouragement on the part of the government to manufacturing industry by subsidy or by protective policy. 2. To expand the industrial laboratory and to encourage the establishment of model factories, and to give subsidy to such established factories. 3. To establish more schools of technology and of commerce, and to encourage the establishment of apprentice schools, and to give subsidy to same. 4. To open a world's fair.—Matters Relating to Transportation: 1. To build more railways, and to complete the already planned lines immediately. 2. To increase steamship lines with government subsidy. 3. To complete works connecting the sea and land transportation to give better facilities. 4. To control all the railways in the Empire as to their business methods, etc. 5. To better (lower) both railway and marine freight rates. 6. To expand the present telephone service.—Matters Relating to Finance and General Economics: 1. To economize the administrative expenditures. 2. To adjust the taxation: (a) either to abolish or lower war taxes injurious to trade or manufacturing prosperity, such as stamp duty on checks, import duty on rice, cocoons, consumption tax on fabrics; (b) government monopolies, such as tobacco, salt, camphor, are desirable neither as a government resource nor as bettering the industry; salt monopoly, first of all, should be abolished as soon as some other resource is found; there should be no other government monopoly. 3. Redemption and consolidation of public land. 4. To give every possible caution to check the overflow of circulating currency. 5. To better the money market. 6. To consolidate the banking houses of the Empire. 7. Immediate establishment of Japano-Chinese bank.

TOLEDO, O.—It is reported that the Toledo Shipbuilding Co. will erect two 4-story buildings soon. One, a power house, 42 × 80 ft., and a pattern shop, 60 × 160 ft.

WILMINGTON, O.—The construction of a 2-story factory building, 150 × 160 ft., is contemplated by the Irwin Auger Bit Co.

COLUMBUS, O.—The Capital Lock-Nut & Washer Co. has purchased a site on which it is reported to be contemplating the erection of a factory.

It is stated that the Gambrinus Brewing Co., 615 South Front St., is taking figures on separate contracts for the construction of its new plant.

BATTLE CREEK, MICH.—It is stated that extensive additions are contemplated by the Union Steam Pump Co. to its present plant.

DETROIT, MICH.—We are advised that plans are completed and bids are being taken for the construction of a testing building for the Aerocar Automobile Co., of this city. A. M. Malcomson, 149 Griswold St., Detroit, is Mgr.

It is stated that the Ford Manufacturing Co., Bellevue Ave., Detroit, will erect a new factory building here. Henry Ford is Pres.

FLINT, MICH.—The contracts for erecting the Buick and Weston-Mott factories here was awarded to the CHARLES A. MORSE CONSTRUCTION Co., of Chicago, Ill.

SAULT STE. MARIE, MICH.—It is stated that Hickler Bros., of this place, will erect a new machine shop here.

CHICAGO, ILL.—It is stated that the Pope Manufacturing Co., 229 North Franklin St., Chicago, will erect a new factory in Chicago, the approximate cost of which is $100,000.

CHICAGO, ILL.—Plans are in progress for a 1-story brick factory building for the Adams & Elting Co., 155 West Washington St., Chicago, on 44th Ave., near Colorado Ave. The plot is 384 × 667 ft. Cost, $50,000. Francis M. Barton, 167 Jackson Boulevard, Chicago, is Arch.

GREEN BAY, WIS.—The Green Bay Cornice & Corrugating Co., of this city, has decided to build an extensive addition to its present plant at 422-428 North Washington St.

ST. PAUL, MINN.—We are advised that the Herzog Iron Works Co. will double the capacity of its present plant on Forest St.

The contract for erecting the car shops for the Great Northern Railway Co. here was awarded to NEWMAN & HOY, of this city.

ST. LOUIS, MO.—We are informed that the Mitchell-Parks Manufacturing Co., 1234 South Seventh St., St. Louis, will erect a new building, 75 × 200 ft., to be used as a foundry and machine shops. J. N. Brown, 1234 South Seventh St., St. Louis, is Secy.

GALVESTON, TEX.—Charles Clarke, Sr., is reported to have purchased a site for machine shops in this city.

PORTLAND, ORE.—The Wren & Maxwell Co. has purchased the mill formerly owned by the Clatskanie Lumber Co. and will add a box factory, dry kiln and planer.

McKINNEY, TEX.—It is reported that the Texas, New Mexico & Pacific Railroad Co. will locate railroad shops here.

TACOMA, WASH.—E. W. Talbott, of this city, has purchased a site on Center St., between M and O Sts., where a factory will be erected for the manufacture of wood-working machinery. The building will be fireproof brick.

SEATTLE, WASH.—Plans are in progress for a shoe factory here for the Washington Shoe Manufacturing Co. The site has been secured but no further details have been given out. T. J. Thorson, Seattle, Wash., is Secy.

COLTON, CAL.—It is stated that about $200,000 is to be expended in enlarging the plant of the California Portland Cement Co. here.

MISCELLANEOUS CONTRACTS.

The names of parties awarded contracts are printed in capital letters.

EXCAVATION.—Jersey City, N. J.—See under Railways: Erie R. R.

CREOSOTED CROSSTIES. — Shreveport, La.—Bids are asked until 7 p. m., Feb. 13, for supplying about 300 creosoted crossties. C. G. Rives, Comptroller.

DREDGING, ETC.—Rock Island, Ill.—We are officially advised that bids are asked until March 6 for dredging and levee work in connection with improvement of Capperas Creek. W. Freichler, Engr., 47 M. & L. Bldg. Rock Island.

SCHOONER. — Sharptown, Md. — THE SHARPTOWN MARINE RAILWAY CO., of Sharptown, Md., has received the award of a contract to build a four-masted schooner for Capt. E. G. Bennett, of that town, at the cost of $30,000.

CEMENT.—Washington, D. C.—Bids are asked until noon, Feb. 28, for furnishing 12,000 bbls., more or less, of Portland cement, at Soldiers' Home, Washington Barracks, D. C. Capt. John Stephen Sewell, Engrs. (Advertised, Engineering News.)

POWDER TANKS.—Washington, D. C.—Bids are asked until 10 a. m., March 13, for delivering f. o. b., at place of manufacture, 3,000 6-in. and 1,000 8-in. powder tanks for the U. S. Navy. H. T. B. Harris, Paymaster-Gen., U. S. N. (Advertised, Engineering News.)

WIRELESS TELEGRAPH APPARATUS.—New York, N. Y.—The Navy Department has awarded the contract for furnishing, at the New York Navy Yard, six sets of wireless telegraph apparatus to the INTERNATIONAL TELEGRAPH CONSTRUCTION CO., for $19,500. Noted last week.

CEMENT.—Nampa, Idaho.—Bids are asked until 2 p. m., March 9, for furnishing about 14,000 bbls. Portland cement, f. o. b. cars, at stations on the Oregon Short Line system within a radius of 25 miles from Nampa, Idaho. E. A. Hitchcock, Secy. Dept. Interior, Washington, D. C. (Advertised, Engineering News.)

BLASTING LEDGE.—Port... Bids are asked until 11 a. ... removing a ledge in front ... navy yard, Mordecai T. E... reau Yards and Docks, Wa... Specifications for this work ... office of Engineering New...

PIER, ETC.—Oakland, Cal... cially informed that plans f... pier and wharves for the ... Ry. Co., at Oakland, will b... der direction of Virgil G. ... Safe Deposit Bldg., San F... leads will be built, prepara... ing land for the pier and ...

CANAL.—Portland, Ore.—A... neers, consisting of D. C. H... Engr., for Washington and ... sulting Engineers A. J. W... Hopson, will meet in Portland ... 10 to consider plans and spe... Umatilla (Ore.) and Okanogan ... jects. The report of the boa... mitted to Washington and wi... Secretary of the Interior for ...

RIVER DIKE. — Bingham... are officially advised that a ... given before the State Riv... Commission, Attorney-General ... bany, on Feb. 28 in regard t... of proposed First Ward river ... C. Johnson, of Niagara Falls, ... the Engineer for the Commis... will be Engineer-in-Charge o... John A. Brown, Atty., repre... Ward. Est. cost is $70,000.

BULKHEAD.—Los Angeles ... officially advised by Capt. C. H. ... Corps of Engrs., that W. C. P... cox Bldg., Los Angeles, has ap... War Department for permission ... a bulkhead to the east of the ... San Pedro Harbor. The proje... and not a federal enterprise. M... informs us that all questions ... right will be finally settled be... of construction will be considered.

CANAL.—Worland, Wyo.—The ... County Irrigation Co. will receive bids until 9 a. m., Feb. 19, for the construction of a 20-mile section of its canal. About one-half of this length can be built with scrapers, the balance by scrapers. Separate bids will be received for each class of work and for the whole. Specifications and profiles can be seen at the Engineer's Office, Worland, Wyo., after Feb. 1. Bids will be received at Basin, Wyo. Address F. H. Whiting, Chf. Engr., Worland, Wyo.

CANAL.—Billings, Mont.—Secretary E. A. Hitchcock, Dept. of Interior, has awarded contract for Division No. 1, Main Canal, Huntley project, to HUGHES & OLSEN, of Butte, Mont., their bid being the lowest, amounting to $170,360. This work calls for the excavation of 100,000 cu. yds. of earth, 2,500 lin. ft. of tunnel, 3,200 cu. yds. of concrete, etc. The award is conditional on the contractors furnishing a satisfactory bond. Schedule of detail bids is given under Contract Prices, in this issue.

CANAL.—Oregon.—Bids are asked until March 15 for the construction of a canal in southern Oregon in accordance with the plans and specifications of J. S. Howard, Engr. The excavation is to be 14 ft. at top, 8 ft. at bottom, 6 ft. deep and 55 miles in length, this being the first section. Address the Secretary of the Gold Hill Canal Co., 825 Law Bldg., Indianapolis. (Advertised, Engineering News.) Plans and specifications are on file at offices of Engineering News, in Washington, D. C., New York City and Chicago, Ill.

LIGHT-HOUSE TENDER.—Washington, D. C.—Bids were opened Feb. 1 at the office of the Light-house Board, Washington, for furnishing the materials and labor of all kinds necessary for the construction and delivery of the twin-screw, steel, sea-going light-house tender "Cypress" for the sixth light-house district. The appropriation is $130,000. Bids were as follows: Maryland Steel Co., Baltimore, $168,000 and $160,000; Harlan and Hollinsworth Corporation, Wilmington, Del., $136,600 and $126,700; Bath Iron Works, Bath, Me., $153,700 and $114,900; Pusey & Jones Co., Wilmington, Del., $161,000 and $151,000.

DITCH.—Willmar, Minn.—Lewis Johnson, County Audr., informs us that bids were received as follows on Feb. 2 for building the Judicial Ditch No. 3: J. C. Green, Willmar, Minn., bid on a part, at 12¾ cts. per cu. yd.; C. A. Bunyan, of Hammond, Ill., bid on part, at 15.35 cts.; Standard Drainage Co., of Windom, Minn., bid on part, at 15 cts.; Canal Construction Co., of Chicago, Ill., bid on part, 15.40 cts.; Jerry Sherwood, home address Hebron, Ind., at present located at Litchfield, Minn., bid on the whole ditch, including branches, 15¼ cts. for a part and 13 cts. for a part; O. F. Doyle, of St. Cloud, Minn., bid on part, 15¼ cts. All of these bids were rejected. The following new bids were then received: O. F. Doyle, of St. Cloud, bid on part, 14⅜ cts.; Jerry Sherwood, bid on the whole ditch, including branches, 13 cts. for part and 14⅜ cts. for part. This bid was accepted. The amount is at present not computed, but will amount to about $70,000.

SUPPLIES.—Washington, D. C.—Bids were opened Feb. 6, at the Bureau of Supplies and Accounts, Navy Dept., Washington, for supplies for the various yards. The following bids are of interest to engineers: one gear trimming press, for Boston Yard, lowest bidder, Drew Machinery Agency, Manchester, N. H., $1,365; one 2,500-lb. steam drop hammer, for Boston Yard, lowest bidder, Alliance Machine Co., Alliance, [illegible]; one 36-in. band sawing machine, for Norfolk Yard, lowest bidder, Drew Machinery Agency, $159; two speed lathes, for Norfolk Yard, Courtney Smith, Richmond, Va., lowest bidder, $275; one screw-cutting engine lathe, for Norfolk Yard, lowest bidder, Courtney Smith, Richmond, Va., $780; one [illegible] grinding machine, for Norfolk Yard, lowest bidder, Courtney Smith, Richmond, $650; [illegible] swing-

ing jib crane... various sizes, for Norfolk Yard, lowest b... North Penn Iron Works, Philadelphia, ... one double-headed motor-driven pedes... inder and polisher, lowest bidder, Mar... Maxwell & Moore, New York. $25... ickel-plating plant, for New Orleans Nav... tion, lowest bidder, Zucker, Levitt & Lo... 1902.

LEVEE... St. Louis, Ill.—We are informed, off... that Mayor Cook has received ... from the Illinois Central, the South... nd the Terminal railroad companies ... agree to raise their tracks from the ... over Broadway, in East St. Louis, ... eastern limits of the city. as a protec... rom high water. The railroads agree ... raise their tracks two ft. above the ... water mark of 1903 for $120,000, ... to pay 85% of the cost and the railroad ... The tops of the embankments are ... 18 ft. wide. The engineers of the rail... will act with W. J. Crocken, City Engi... East St. Louis. After this work is d... there will remain a gap of 400 yds. ... the viaduct and the retaining wall ... the mayor states, he will endeavor to ... the Terminal railroad association ... on the same plan as that south of the viaduct. Mayor Cook will notify the railroads to commence work on the grade at once. To cover the cost of this improvement a tax has been levied of $60,000 a year for seven years, of which $120,000 has been collected.

STEEL, CAST IRON, ETC.—Glendive, Mont.—We are informed by Charles Stabern, Structural Contractor on Divisions One, Two and Three, "Lower Yellowstone Project," Glendive, Mont., that he will require the following supplies, for which bids are desired: "Guides for flash boards—All L's, plate, bolts and rivets as listed on drawing C-III.; supports for wheel stands—10-in. I-beams, 25-lb., 22 pieces, 8 ft. 9 ins. long; bolts for ice guard—3/8-in. wedge bolts 26 ins. long with nuts and washers, 8 pieces 1-in. rod, 9 ft. long, right hand thread cut on one end, 8 pieces 1-in. rod, 9 ft. long, left hand thread cut on one end, 8 turn-buckles for the above; bolts for roof guard—3/8, 3/4-in. wedge bolts 16 ins. long with nuts and washers; for sluiceways—details shown on drawing A-28. Each sluiceway has two gates and as I have three sluiceways on my contract there will be six gates in all to be furnished complete with all bolts, L's, rivets and all other material necessary to put together. All the iron work shown on this sheet is to be furnished by me, excepting that noted on the detail of stem connection near the center of the sheet; that is, the United States will furnish the lifting device and the stems for each gate. Everything below the connection is to be furnished under my contract." Specifications and detail drawings of the parts of the work that are necessary to see in order to submit bids on the iron work, are on file at office of Engineering ...ews, New York.

RIVER AND HARBOR IMPROVEMENTS. —Grand Rapids, Mich.—We are officially informed that the projects planned for the coming season by the United States Engineers Office, East Shore Lake Michigan division are as follows: (1) Michigan City Harbor, Ind.—Completion of dredging away bend and formation of turning basin in lower channel and dredging of upper channel by contract work; dredging of lower channel for maintenance of usual depths by U. S. dredge. (2) (a) St. Joseph Harbor, Mich.—Dredging of channels for maintenance of usual depths by U. S. dredge. (b) St. Joseph River, Mich.—A small amount of wing dam construction by hired labor. (3) South Haven Harbor, Mich.—Dredging for maintenance of usual depth in channel, by U. S. dredge. (4) Saugatuck Harbor, Mich. —Dredging for maintenance of usual depths in channel, by contract. Completion of existing contract for opening new channel into Kalamazoo River. (5) Holland Harbor, Mich.—Extension of piers, with new plan for preventing injurious wave action within the harbor, under contract. Repairs of north pier by hired labor and purchases in open market. Dredging for maintenance of usual depths in channel by U. S. dredge. (6) Grand Haven Harbor, Mich.—Dredging for maintenance of usual depths in channels, by U. S. dredge. Repairs to piers by hired labor and purchases in open market. (7) Grand River, Mich.—Work of building a new tug boat, using partly old and partly new machinery, for use in towing river plant two dredges, conveyor, pile driver, living boats, etc., is progressing, also the work of converting the old dredge "Saginaw" into a conveyor using partly old and partly new machinery is in progress. Operations for deepening and widening the channel from Grand Rapids to Grand Haven, Mich., will be prosecuted by hired labor, and with government plant during the season. (8) Muskegon Harbor, Mich.—Constructing new retainment ... under contract. Dredging for maintenance of usual depths in channel by U. S. ...ge. (9) White Lake and Pentwater Harbors, Mich.—Dredging for maintenance of usual depths in channel under contract ... a small amount of pier repairs by hired labor. (10) Ludington Harbor, Mich. —Dredging for maintenance of usual depths in channel by U. S. dredge. (11) Manistee Harbor, Mich.—Dredging for maintenance of usual depths in channel, partly by contract and partly by U. S. dredge. With action by Congress on new project this harbor may be widened and deepened. (12) Portage Lake Harbor, Mich.—Dredging for maintenance of usual depths in channel by U. S. dredge. (13) Arcadia Harbor, Mich.—Dredging for maintenance of usual depths in channel by contract. (14) Frankfort Harbor, Mich.—Dredging for maintenance of usual depths in channel by U. S. dredges and a small amount of pier repairs by hired labor. (15) Charlevoix Harbor, Mich.—Repairs to revetments upper and lower channels by contract and maintenance of usual depths in channels by U. S. dredge. (16) Petoskey Harbor, Mich.—Extension of breakwater and completion of existing contract for extension of same by contract. Col. Milton B. Adams, Corps of Engrs., 57 Park St., Grand Rapids, Mich., is Engr.-in-Charge.

CONTRACT PRICES.

The names of parties awarded contracts are printed in capital letters.

WATER-WORKS.—Fort Wayne, Ind.—(Table No. 2) Bids for auxiliary pumps were: Platt Iron Wks., Dayton, O., one vertical turbine pump, 2,000 gallons capacity, 36-ft. head, 30-HP. motor, brass impeller, no fittings, f. o. b. Ft. Wayne, $1,520; Dayton Hyd. Co., Dayton, O., one Brooks centrifugal pump, 2,000 gallons capacity 36-ft. head, bronze impeller, 35-HP. motor, all equipped and installed, $1,320; Byron Jackson Co., San Francisco, Cal., one vertical Jackson centrifugal pump, 2,000 gallons, 36-ft. head, one 35-HP. motor, 110 volts, f. o. b. Ft. Wayne, $1,600; one vertical Jackson centrifugal pump, 600 galls., 200-ft. head, 15-in. diameter, 200-ft. lift, 5-stage, 1,160 revolutions, 50% efficiency, $2,000; one vertical deep well pump, 500 gallons, 200-ft. head, 14-in. diameter, 1,150 revolutions, 7-stage, 10-in. discharge, $1,800.

WATER-WORKS.—Ft. Wayne, Ind.—(Table No. 3) Two boilers, 150 HP. each, for 150-lb. steam pressure: Springfield Boiler Works, Springfield, Ill., Scotch marine type, $5,550 or $5,380 without grates. Bass Foundry & Machinery Co., Fort Wayne, Ind., return tubular type, $4,075, or $3,870 arranged for stokers; water tube type, $5,800, or $5,550 arranged for stokers; Scotch marine, $5,400. Stirling Co., Chicago, water tube boilers, $6,460 for Altman-Taylor type, or $5,300 for Stirling type.

WATER-WORKS.—Ft. Wayne, Ind.—(Table No. 4) Proposals for stokers and furnaces for two boilers, 150 HP. each: Scotch marine, Hawley Down Draft Furnace Co., $1,936; Springfield Boiler Works, $1,925; Underfeed Stoker Co., Chicago, $1,925. Return tubular, Hawley Down Co., $1,550; Underfeed Stoker Co., $1,830. Heine water tube, Hawley Down Co., $1,936; Underfeed Stoker Co., $1,830. B. & W. water tube, Hawley Down Co., $1,936; Underfeed Co., $1,830. General price: American Stoker Co., $1,887; Westinghouse Mac. Co., $1,750; Detroit Automatic Stoker Co., Detroit, Mich., $1,485.

WATER-WORKS.—Ft. Wayne, Ind.—(Table No. 5) For heater and purifier, 300 HP. capacity: Platt Iron Works, Stillwell c.-I. feed water heater and purifier, 3 ft. 9 ins. long, 2 ft. 1 in. wide, 6 ft. 4 ins. high, wt., 3,400 lbs., $254; S. J. Cookson, Cincinnati, O., heater and purifiers, 300 HP., dia. 41 ins., 10 ft. 6 ins. high, weight, 4,200 lbs., $580; Kaestner & Co., Chicago, Ill., heater and purifier system, $900; Bass Foundry Co., Ft. Wayne, heater, $450.

WATER-WORKS.—Ft. Wayne, Ind.—(Table No. 6) Bids for gate valves: (1) Rensselaer Mfg. Co., Troy, N. Y.; (2) Ludlow Mfg. Co., Troy, N. Y.; (3) Chapman Valve Co., Indian Orchard, Mass.; (4) Roe-Stevens Mfg. Co., Detroit, Mich.; (5) R. D. Wood & Co., Camden, N. J.:

	(1)	(2)	(3)	(4)	(5)
10-in and 12-in. valve boxes	.....	$3.00	$2.95	$4.00	$2.75
16-in. valve boxes	$3.00	2.50	2.70	4.00	2.75
Other valve boxes	3.00*	3.00 } 3.25 }	2.90 } 3.15 }	4.00	2.75
6-in. valves (weight, lbs.)	190	180	144	185	200
Price	$11.30	$11.50	$10.35	$11.50	$11.50
8-in. valves (weight, lbs.)	290	250	248	280	280
Price	$17.00	$16.80	$16.65	$17.50	$17.20
10-in. valves (weight, lbs.)	405	400	369	420	440
Price	$24.00	$24.00	$24.30	$26.00	$23.10
12-in. valves (weight, lbs.)	570	500	543	500	700
Price	$30.50	$30.50	$32.85	$32.00	$30.75
16-in. valves (weight, lbs.)	1,190	875	915	1,100	1,200
Price	$80.00	$57.50	$53.55	$72.00	{ $57.00 / $70.00 }
20-in. valves (weight, lbs.)	2,400	3,130	3,125	2,200	5,330
Price	$190.00	$150.00	$190.80	$225.00	$300.00
20-in. valves (test, lbs.)	100	100	100	100	100

WATER-WORKS.—Fort Wayne, Ind.—Proposals were received by F. W. Urbahns, Secy., Trustee of Water-Works, on Dec. 21, for furnishing work and material for the improvement of the city water-works. The work includes: (Table No. 1) high duty pumping engine of 10,000,000 gallons capacity per day; an auxiliary pumping plant of 6,000,000 gallons capacity per day; (Table No. 2) a vertical shaft and centrifugal pump, with electric motor, of a capacity of 2,000 gallons per minute; a deep well pump for use in a tubular well; (Table No. 3) two 150-HP. boilers; (Table No. 4) two automatic stokers for boilers; (Table No. 5) a feed water heater and purifier; (Table No. 6) gate valves. Daniel W. Mead is the Consult. Engr., 738 First National Bank Bldg., Chicago, Ill. The itemized bids for the pumping engine were as follows: (AA) Marine Engine & Machine Co., 126 Liberty St., New York; (BB) William Tod Co., Youngstown, O.; (CC) Allis-Chalmers Co., Milwaukee, Wis.; (DD) Snow Steam Pump Works, Buffalo, N. Y.; (EE) Holly Mfg. Co., Lockport, N. Y.; (FF) Laidlaw-Dunn-Gordon, Cincinnati, O.; (GG) Platt Iron Works, Dayton, O.; (HH) Heisler Pump Co., St. Mary's, O.; (JJ) Henry R. Worthington, 116 Liberty St., New York, N. Y. (Table No. 1):

BIDS RECEIVED AT FORT WAYNE, IND., DECEMBER 21, 1905, BY F. W. URBAHNS, SECY., TRUSTEE OF WATER-WORKS, FOR FURNISHING WORK AND MATERIAL FOR THE IMPROVEMENT OF THE CITY WATER-WORKS.

Description of Pump.	(AA) Horizontal Crank and Fly Wheel.	(BB) 3-Pumps Single Actinc.	(BB) Triple Expansion —Vertical.—	(BB) Horizontal Crank and —Fly Wheel—	(CC) Vertical Cross —Comp'd—	(DD) Horizontal Cross Comp'd Crank and —Fly Wheel.—	(EE) Direct Acting Horiz. Duplex Comp'd	(EE) Horizontal Crank and —Fly Wheel.—	(FF) Horizontal (Tandem Comp'd. Crank and Fly Wheel.	(GG) Vertical (Tandem Comp'd. Crank and Fly Wheel.	(GG) Vertical Triple Expansion.	(HH) Horizontal (Tandem Comp'd.	(HH) Vertical Cross Comp'd.	(HH) Horizontal (Tandem Comp'd.	(HH) Vertical Triple Expansion.	(JJ) Horizontal Duplex Triple Expansion.
Pressures: Steam, lbs	125	125	125	125	125	125	125	125	125	125	125	125	125	125	125	125
Water, dom. lbs	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
Water, fire, lbs	125	125	125	125	125	125	125	125	125	125	125	125	125	125	125	125
Capacity, million gallons	8	10	8	10	8	8	6	8	6	10	10	6	6	6	6	6
Piston speed, ft.	270	270	210	240	210	246	104	170	270	240	240	240	240	275	275	....
Revolutions per minute	54	54	35	40	42	41	26	30	54	....	....	....	50	....	....	....
Duty in million ft. lb. against domestic pressure: full load	125	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
" half load	117	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Size of steam cylinders: H.P. Ins.	18	20	18	22	20	18	16	18	14	22	15	17	17	17	17	24
I.P. Ins.	....	....	28	32	....	....	....	....	....	....	....	....	....	....	....	....
L.P. Ins.	2.25	2.28	44	48	40	42	28	36	38	44	26	30	30	34	34	44
Plunger, ins.	18¾	Single	....	....	....	19 Double	23 Double	21¾ Double	17¾	32	16	18	18	14	14	14
Stroke, ins.	20	Acting	30	36	30	36	36	24	30	30	30	36	30	30	30	30
Condenser, type	Surf.	....	Jet or Surf.	....	Surf.	....	....	Jet and Surf.	....	....	....	....	....	....	....	....
" area, sq. ft.	....	....	....	....	625	600	....	....	....	....	....	....	....	....	....	....
Air pump, type	Air and Bilge—	Attached	Attached	Attached	Attached	Attached	Attached	Attached	....	....	Attached	Attached	Attached	Attached	Attached	....
" size, ins.	....	....	18x36	18x12	17x30	....	....	16x14	....	....	16x14	14x14	10	Attached	10x8	....
Steam valves and gear	....	....	Corliss	Corliss	Corliss	Corliss	Corliss	....	....	....	Duplex Type	Vol. Mot.	Corliss	Corliss	Corliss Slide	Vol. ¾ Rot.
Fly wheel, dia., ft.	....	....	2-12	14	14	14	14	13	....	....	15	12	14	10	10	Vol. 1-12
" weight, 1000 lbs. each	....	....	14	30	18	23	21	19	....	....	15	21	14	14	14	12
Pump valves, per cent. area	2	....	16	21	15	21	19	19	....	....	....	22	26	15	15	12
" number and dia. Ins.	150	....	150	150	145	175	155	110	....	....	....	....	155	155	155	130
Suction pipe, ins.	4	....	14—8¾	10—5	12—8	12—8	10—6	10—6	....	....	7—	14—8	10—	8	8	....
Discharge pipe, ins.	....	....	10—5	8—3	10—6	10—6	8—5	8—5	....	....	5—	10—6	8	6	6	....
Piston rods: H.P. Ins.	....	....	5	5	5	5	4	4	....	....	4	4	4	4	4	4
I.P. Ins.	....	....	5	5	5	5	4	4	....	....	4	4	4	4	4	4
L.P. Ins.	....	....	5	5	5	5	4	4	....	....	4	4	4	4	4	4
Plunger rods, Ins.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Main shaft, ins.	....	....	12 & 13	11 & 12	12 & 13	10 & 11	9 & 12	9 & 12	....	....	10 & 13	9 & 13	8 & 9	8 & 9	8 & 9	8 & 9
Main journal, ins.	....	....	12x15	11x16	12x18	10x16	10x16	9x12	....	....	10x15	9x15	8x10	11x12	11x12	8x10
Approximate weight, 1000 lbs.	....	....	475	400	500	278	325	253	....	....	270	180	121	156	156	156
Time of delivery, months	....	....	4	10	8	8	6	6	....	....	5	7	5	5	5	....
Floor space, ft.	....	....	30x18	30x18	33½x16½	33½x16½	34—6½x16	34—6½x16	18x15	18x15	25x15	22x15	12x8	29½x14	21½x8	8'
Lagging	....	....	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Wallnut	Steel	Steel	Steel	Steel
Price bid, erected inc. foundation, no piping	$20,850	$22,450	$48,000	$42,000	$28,800	$26,600	$36,300	$31,500	$27,200	$22,175	$8,150	$32,500	$27,500	$15,000	$24,250	$25,250	$12,200	$15,550	$13,350
Price per million gallons	2,606	2,245	4,800	5,250	3,600	3,325	6,050	3,937	2,720	2,772	1,358	3,250	3,444	2,500	4,040	4,208	2,033	2,592	2,225

* NOTE.—Sizes of parts not given as required in specifications. This bid informal.

SEWERAGE.—Washington, D.C.—Bids were opened Jan. 15, at the office of the Commissioners of the District of Columbia for constructing 9,500 ft., more or less, of trunk sewer, 8-ft. 4-in. x 9-ft. 4-in., the same being a portion of the sewage disposal outfall sewer (Section "C") in the District of Columbia, extending between the U. S. Asylum for the Insane and the U. S. Naval Magazine, including storm-water by-pass and special structures appertaining thereto. Each bidder submitted two proposals: "A" work to be begun within 40 days from award, and to be completed within ten months; "B" work to be begun in 40 days and completed within 16 months. The bidders were as follows; (a) Patrick MacGovern, 6 Beacon St., Boston, Mass.; (b) The Brennan Construction Co., 3056 K St., N. W.; (c) Warren F. Brenizer Co., Second and O Sts., S. E.; (d) The J. Connelly Construction Co., 4½ St., near H St., N. W.:

1. For ordinary excavation, 87,000 cu. yds., per cu. yd.:

	(a)	(b)	(c)	(d)
"A"	$1.42	$1.42	$1.15	$1.48
"B"	1.38	1.31	1.07	1.44
Total:				
"A"	$123,540	$123,450	$100,050	$128,760
"B"	120,060	113,970	93,090	125,280

2. For red brick masonry, laid in Portland cement mortar, 475 cu. yds., per cu. yd.:

	(a)	(b)	(c)	(d)
"A"	$15.45	$13.50	$15.00	$12.00
"B"	15.00	12.50	14.00	12.00
Total:				
"A"	$7,339	$6,412	$7,125	$5,700
"B"	7,125	5,937	6,650	5,700

3. For vitrified brick masonry, 1,540 cu. yds., per cu. yd.:

	(a)	(b)	(c)	(d)
"A"	$22.06	$21.60	$23.00	$21.00
"B"	22.00	20.00	21.00	21.00
Total:				
"A"	$34,896	$33,264	$35,420	$32,340
"B"	33,880	30,800	32,340	32,340

4. For concrete masonry, "B," in place, 8,000 cu. yds., per cu. yd.:

	(a)	(b)	(c)	(d)
"A"	$7.50	$8.53	$8.60	$7.40
"B"	7.25	7.80	8.20	7.40
Total:				
"A"	$60,000	$68,240	$68,800	$59,200
"B"	58,000	62,400	65,600	59,200

5. Concrete masonry, "C," in place, 10,000 cu. yds., per cu. yd.:

	(a)	(b)	(c)	(d)
"A"	$7.00	$8.32	$8.20	$7.00
"B"	6.75	7.70	7.80	7.00
Total:				
"A"	$70,000	$83,200	$82,000	$70,000
"B"	67,500	77,000	78,000	70,000

6. For 6-in. diameter pipe under drain, in place, 9,430 lin. ft., per lin. ft:

	(a)	(b)	(c)	(d)
"A"	$0.25	$0.27	$0.35	$0.25
"B"	.20	.25	.30	.25
Total:				
"A"	$2,357	$2,546	$3,300	$2,357
"B"	1,886	2,354	2,829	2,357

7. For 24-in. diameter pipe in place, 75 lin. ft., per lin. ft.:

	(a)	(b)	(c)	(d)
"A"	$3.00	$1.62	$1.00	$3.00
"B"	3.00	1.50	1.00	3.00
Total:				
"A"	$225	$121	$75	$225
"B"	225	112	75	225

Grand total:

	(a)	(b)	(c)	(d)
"A"	$298,358	$317,324	$296,770	$298,582
"B"	288,676	292,577	278,584	295,102

MAIN CANAL.—Billings, Mont.—Schedule of bids received on Jan. 15 for the construction of the main canal, division one, Huntley project, is here given. H. N. Savage is Supervis. Engr.; E. G. Hopson, Consult. Engr.; R. S. Stockton, Project Engr. The bidders were: (1) NICK HUGHIS and NELS L. OLSON, of Butte, Mont.; (2) Billings Construction Co., Billings, Mont.; (3) P. McDonnell, Duluth, Minn. (proposal was informal, as no guaranty bond was given); (4) Cotton Bros. & Co., Oakland, Cal.; (5) Cook Construction Co., Des Moines, Ia. (proposal conditional; all of division or none):

	(1)	(2)	(3)	(4)	(5)
65,000 cu. yds. dry excavation, class 1....	$0.20	$0.50	$0.25	$0.23	$0.30
1,000 cu. yds. dry excavation, class 2....	.45	.75	.60	.60	2.50
16,000 cu. yds. dry excavation, class 3....	1.00	1.10	1.25	1.20	2.50
13,000 cu. yds. wet excavation, class 1.....	.60	.65	1.00	.54	2.90
5,000 cu. yds. wet excavation, classes 2 & 3	2.50	2.50	2.50	2.50	5.00
1,000 cu. yds. overhaul.....	.03	.05	.05	.02	.03
1,300 ft. tunnels, type 1.....	35.00	32.00	40.00	41.50	25.00
500 ft. tunnels, type 2.....	38.00	38.00	45.00	43.50	31.00
740 ft. tunnels, type 3.....	42.00	43.00	49.00	44.50	30.00
2,200 cu. yds. concrete, class 1.....	5.75	7.00	5.00	8.50	6.75
1,000 cu. yds. concrete, class 2.....	9.50	10.00	7.00	9.50	7.70
4 gates (each) setting gate and appurtenances	400.00	300.00	600.00	300.00	50.00
100 cu. yds. riprap.....	3.00	3.00	2.00	3.00	5.00
100 cu. yds. rubble wall.....	3.50	3.00	4.00	4.00	3.00
200 cu. yds. paving.....	3.00	3.00	3.00	10.00	6.00
Total	$170,360	$192,070	$194,760	$195,020	$219,680

MAIN CANAL.—San Francisco, Cal.—In connection with the Oregon-California "Klamath Project," bids were received on Dec. 29, at San Francisco, for construction of the main canal. G. Y. Wisner is Consult. Engr.; O. H. Ensign, Consult. Engr.; J. B. Lippincott, Supervis. Engr.; T. H. Humphreys, Project Engr. The bidders were as follows: (a) Mason, Davis & Co., Portland, Ore.; (b) Clement & Strang, Salt Lake City, Utah; (c) International Contract Co., Seattle, Wash.; (d) San Francisco Bridge Co., San Francisco, Cal.; (e) Beard & Beard, Modesto, Cal.; (f) R. A. Moncure, Reno, Nev.*; (g) Harry L. Millerd, Chicago, Ill.; (h) Root & Fennick, San Francisco, Cal.*; (i) Robert Wakefield, Portland, Ore.; (j) Stone & Stone, Oakland, Cal.*; (k) Curtis Engineering Co., New York, N. Y.†; (l) Bay & River Dredging Co., San Francisco, Cal.; (m) Cotton Bros. Co., Oakland, Cal.; (n) William K. Brown, Hollister, Cal.:

*Total work or none. †Irregular.

MINING MACHINERY.—Jalisco.—A company has been organized in Chicago to work the Boca Ancha mine, in the Parnaso district, State of Jalisco. The company is styled The Boca Ancha Mining Co. It is proposed to erect a ten-stamp mill, with 1,000 lb. stamps, also concentrating tables and cyanide tanks. Charles E. Lee, of Chicago, is Pres. of the company; C. C. Bruckner, of Guadalajara, Jal., Vice-Pres. and Treas.; Geo. E. Zimmerman, of Chicago, Secy.; and Dr. Geo. E. Purnell, of Guadalajara, Mgr. The Chicago offices of the company are at 34 East Munroe St.

BULL RING.—City of Mexico, Mex.—Ramon Lopez has purchased 30,000 sq. meters of land, in the western part of the City of Mexico, on which to build a bull ring. The ground was purchased from Engineer Echegaray, who has agreed to build the amphitheater within 18 months.

RAILROAD.—Jalisco.—The Jalisco Railway Co., which is to build from Guadalajara to the Pacifico coast port of Chamela, has purchased 160,000 sq. meters of land for the Guadalajara terminals, and arrangements are being made for the early inauguration of construction of the line.

WATER POWER.—Jalapa, V. C.—Application has been made by Angus H. McLean, of Jalapa, capital of the state of Veracruz, for a concession to divert 1,500 liters of water per second from the Rio Grande Misantla to generate motive power. The scheme will necessitate extensive works, which will be on his own land.

RAILWAY SHOPS AND ROUND-HOUSE.—Gomez Palacio, Durango.—Work will be commenced soon on the new division shops for the Mexican Central R. R. Co., at Gomez Palacio. A round-house to accommodate twelve locomotives will be constructed, with the necessary shops for repairs.

MINING MACHINERY. — Guanajuato.—It is reported that the Guanajuato Reduction & Mines Co., which has just completed an 80-stamp mill, will install 80 additional stamps during the present year. The present capacity of the mill is 250 tons daily. The capacity of the mill may be increased to 1,500 or 2,000 tons per day.

SAW MILL.—Ocotlan, Oax.—The erection of a large saw mill, in addition to the one now in operation, is contemplated by Cerro Majarra Plantation Co., whose property is located near Ocotlan, state of Oaxaca. Dr. G. A. Vawter is Secy. and Treas. of the company, and may be addressed at Ocotlan, Oax.

RAILROAD.—Jalisco.—George L. Cumine has completed the location for the Decauville railroad that will connect the Mololoa mine with the town of Tequesquite, state of Jalisco. The estimated cost of the road is $100,000. Construction will soon commence. The road will be built by CARLOS ROMERO, the owner of the mine, whose address is Circo Mercantil, Guadalajara, Jal.

SMELTER. — Jalisco. — A company, organized under the name of the Cuartas Mining Co., has purchased the old Cuartas mines, in the Bautista district of Jalisco. The erection of a smelter is contemplated by the company. H. M. McIntosh, of Chicago is Pres. of the company; William H. Lees, Gen. Mgr. of the Mexican-Union Mining Co., operating in Ayutla district, is Vice-Pres. and Gen. Mgr., and William T. Sheffield, of Chicago, is Secy. and Treas. The capital of the company is $100,000 gold.

ELECTRIC RAILROAD. — Guadalajara, Jal.—The Compania Industrial de Guadalajara, the French light and Power company, of Guadalajara, which owns several extensive cotton factories near the city, will commence construction of an electric line, very soon, to connect its mills with the Mexican Central R. R., and will also cover a good portion of the city for passenger service. The line will be about eight miles long, and may be extended in the future. Antonio Gas, proprietor of La Ciudad de Mexico dry goods establishment, is Pres. of the company. The cost of the line will be about $ 80,000.

RAILROAD.—Federal Distrito.—The opposition for the Ferrocarril de Circunvalacion del Distrito Federal (Circuit railroad) granted Sept. 29, 1899, to Diaz Rubio and José Garcia, has been acquired by Telesforo Garcia, Col. Felix Diaz and Joaquin Baranda, all of the City of Mexico, who have been granted an extension of time for the construction of the road until 1914, with the obligation to complete ten kilometers by January, 1907, in addition to the portion of the line now completed, and thereafter at least ten kilometers each year. This road will connect the various towns within the limits of the Federal District.

MINING MACHINERY.—Sinaloa.—The Oro Fino Mining Co., of Los Angeles, Cal., will erect a ten-stamp mill at its mining property, in the Rosario district of the state of Sinaloa, as soon as the development work warrants it. J. W. A. Off, C. F. Whitter, Isaac Bryson and C. Butterfield, of Los Angeles, compose the company.

HYDRO ELECTRIC PLANT.—Mexico.—Eduardo Vinas, of the city of Mexico, has made application to the department of fomento for a concession to utilize the waters of the Xalapango and Papalota rivers, in the state of Mexico, for motive power to generate electric energy, to be used for power and light. Mr. Vinas is acting in behalf of Miguel Cervantes y Estanillo.

SCHEDULE NO. 1 (DIVISION 1) STATION 6 TO STATION 80.

	(a)	(d)	(h)	(i)	(j)	(k)	(l)	(m)	(n) *
6,700 cu. yds. earth excavation..wet, class 1.....	$1.00	$1.00	$1.00	$0.75	$2.50	$1.00	$0.56	$0.[illegible]	$2.00
100 cu. yds. earth excavation—wet, class 3.....	1.50	2.00	2.50	5.00	5.00	10.00	6.75	[illegible]	5.00
36,700 cu. yds. earth excavation—dry, class 1.....	.18	.28	.25	.20	.50	.25	.40	[illegible]	.50
35,600 cu. yds. earth excavation—dry, class 2.....	.35	.55	.60	.93	.75	.45	.56	[illegible]	.70
35,700 cu. yds. earth excavation—dry, class 3.....	1.25	1.00	1.10	2.00	1.25	1.50	.68	[illegible]	.80
6,900 sq. yds. paving.....	.75	2.00	1.00	2.50	2.50	1.50	3.00	[illegible]	2.50
6 scts headworks—steel gates and guides, standard screws, and all operating mechanism complete in place	750.00	900.00	1,000.00	960.00	1,500.00	1,200.00	995.00	920.00	[illegible]
4,000 cu. yds. concrete in canal lining, bridge piers turnouts, culverts, headwks, & tunnel portals	8.00	11.10	9.00	9.00	12.00	7.50	16.25	9.00	15.00
10 cu. yds. reinforced concrete in headworks....	15.00	20.00	10.00	20.00	14.00	15.00	20.00	10.00	15.00
3,100 lin. ft. tunnel—excavation.....	25.00	32.50	42.00	28.50	35.00	47.00	45.00	48.00	75.00
3,100 lin. ft. tunnel—concrete lining.....	16.00	17.00	18.00	24.00	15.00	17.00	30.25	15.50	20.00
100 cu. yds. puddling	1.00	1.50	1.00	3.00	1.50	1.00	2.00	1.00	2.00
Total	$239,566	$289,856	$311,855	$339,633	$336,465	$332,645	$388,664	$340,100	$335,725

SCHEDULE NO. 2 (DIVISION NO. 2) STATION 80 TO STATION 252.

	(a)	(b)	(e)	(h)	(i)	(j)	(k)
237,800 cu. yds. earth excavation—dry, class 1	$0.18	$0.159	$0.24	$0.25	$0.24	$0.19	$0.22
65,000 cu. yds. earth excavation—dry, class 2	.35	.42	.44	.60	.53	.55	.45
100 cu. yds. earth excavation—dry, class 3	1.25	2.00	.85	1.10	2.00	1.25	3.00
400 cu. yds. concrete in bridge piers, turnouts and culverts.....	7.00	6.80	15.00	9.00	15.00	12.00	7.50
150 cu. yds. reinforced concrete in culverts	12.00	7.50	20.00	10.00	20.00	14.00	15.00
500 sq. yds. paving.....	1.00	2.00	5.00	1.50	2.50	2.50	2.50
100 cu. yds. puddling.....	1.00	.75	.30	1.00	3.00	1.50	1.00
Total	$71,089	$70,482	$97,551	$104,870	$102,590	$102,807	$88,736

SCHEDULE NO. 3 (DIVISION NO. 3) STATION 252 TO STATION 494.

	(a)	(b)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
250,000 cu. yds. earth excavation—dry, class 1.....	$0.18	$0.159	$0.188	$0.295	$0.23	$0.25	$0.19	$0.19	$0.22
50,000 cu. yds. earth excavation—dry, class 2.....	.35	.42	.35	.40	.45	.60	.49	.55	.45
100 cu. yds. earth excavation—dry, class 3.....	1.25	2.00	.60	1.00	2.00	1.10	2.50	1.25	3.00
350 cu. yds. concrete in bridge piers, turnouts, and culverts	7.00	6.80	15.00	9.00	8.00	9.00	15.00	13.00	7.50
100 cu. yds. reinforced concrete in culverts.....	12.00	7.50	18.00	9.00	8.00	10.00	20.00	15.00	15.00
300 sq. yds. paving	1.00	2.00	4.50	2.50	3.00	1.50	2.50	2.75	2.50
100 cu. yds. puddling	1.00	.75	.30	1.50	2.00	1.00	3.00	1.50	1.00
Total	$66,675	$64,755	$72,990	$76,300	$84,900	$97,310	$80,550	$92,150	$82,775

SCHEDULE NO. 4 (ALL DIVISIONS) STATION 6 TO STATION 494, HIGHWAY BRIDGES.

	(a)	(c)	(d)	(h)	(i)	(j)	(k)	(m)
5 spans 86-ft. Howe truss span superstructure complete in place..	$1,720	$1,158	$1,280	$1,500	$3,100	$2,250	$1,320	$1,280
1 span 80-ft. Howe truss span superstructure complete in place..	1,600	1,038	1,230	1,490	2,900	2,000	1,250	1,200
Total	$10,200	$6,828	$7,630	$8,990	$18,400	$13,250	$7,850	$7,000
Grand total	$387,530	.....	.....	$523,025	$541,173	$544,735	$512,006(?)	.....

MEXICO.

The names of parties awarded contracts are printed in capital letters.

WHARF.—Manzanillo.—Col. D. B. Giles, of Eldon, Ia., will superintend the construction of the wharf to be built by the Mexican Central Railway Co. at Manzanillo.

SMELTER. — Monclova.—The Continental Mining Co. has been granted a concession by the state of Coahuila to establish smelting works near the town of Monclova, where the company owns several mines.

ELECTRIC LIGHT AND POWER MACHINERY.—Chihuahua.—The Compania Industrial Mexicana, of the city of Chihuahua, is contemplating the purchase of a large amount of new machinery for its electric light and power plant.

WATER-WORKS DAM.—Chihuahua.—Governor Enrique C. Creel, of Chihuahua, states that as soon as the plans and specifications are received from the city of Mexico bids for the construction of the great dam on the Chuviscar River will be called for.

SEWAGE PURIFICATION.—City of Mexico.—The purification of sewage in one section of the city of Mexico is under consideration by the board of health. It is proposed to use septic tanks, in Tacubaya, a suburb, first. Dr. Leiceaga is Pres. of the Bd.

FREIGHT CARS.—Mexico.—The Mexican International Railroad Co. is to purchase 300 freight cars at once. The cars will be of the gondola pattern, with capacity of 80,000 lbs. each, equipped with the latest safety appliances and air brakes, and quick delivery will be required.

ELECTRIC TRAMWAYS. — Chihuahua. — E. H. Keating, Engr., of Toronto, Ont., is in the city of Chihuahua investigating the possibilities of the city for an electric system of tramways. He is also studying the electric light and power plant, and the mineral railroad to Santa Eulalia. His clients are Canadial capitalists, and probably are the same who are establishing the electric street car system and the sewer and water-works in the city of Monterey, Nuevo Leon.

MACHINERY.—Gomez Palacio, Durango.—E. P. STEIN, of Gomez Palacio, has been awarded a contract for machinery, including boilers and engines, for the large guayule rubber factory to be erected at Saltillo, Coah. The cost of the machinery will be about $150,000.

CIVIL SERVICE EXAMINATIONS

AID.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on March 14-15 for two vacancies in the position of aid, in the Coast and Geodetic Survey. Salary, $720 a year. Application form 1312.

EXAMINATION QUESTIONS AND ANSWERS.—The Engineering News Publishing Co., 220 Broadway, New York, will have ready on Feb. 5, the questions and answers covering 15 years' examinations for the position of assistant engineer to Rapid Transit Commission. An examination will be held on Feb. 13 to secure eligibles for this position. On Feb. 6 there will be ready the questions and answers for transitman and computer. Further details are given on page 32 of the advertising section in this issue of Engineering News.

MECHANICAL DRAFTSMAN.—New York, N. Y.—An examination will be held on Feb. 27, at 10 a. m., for position of mechanical draftsman. Draftsmen are required to fill the following positions in the Bureau of Buildings and the Board of Education: Electrical draftsmen, salary $1,300 to $1,600 a year. Heating and ventilating draftsmen, $1,500 to $1,850. Sanitary draftsmen, $1,200 to $1,600. William F. Barker, Pres. Municipal Civil Service Commission, 61 Elm St. (Advertised, Engineering News.)

INDUSTRIAL NOTES.

WM. ARTHUR FALKENAU, Consult. Engr., has opened an office at 919 Witherspoon Bldg., Philadelphia.

McCLINTIC-MARSHALL CONSTRUCTION CO. has opened an office in Missouri Trust Bldg., St. Louis, in charge of G. I. Finley, Contracting Engineer.

THE WEBER STEEL-CONCRETE CHIMNEY CO. has removed its offices from 159 La Salle St. to Suite 930 Marquette Bldg., 204 Dearborn St., Chicago.

HINCHMAN, PILOT & TOOKER have been organized for the practice of landscape architecture and engineering, with offices at 52 Broadway, New York.

THE RAILWAY APPLIANCES CO., Old Colony Building, Chicago, reports that it has purchased and will operate the firm of Pedrick & Ayer, of Plainfield, N. J.

THE PASSAIC STEEL CO., Paterson, N. J., has secured the contract for the structural steel for a new building for the N. Y. Club, Fifth Ave. and 35th St. H. J. Hardenburg, Archt. and Wells Bros., contractors.

BROWN & READ, 1212 Hartford Building, Chicago, is a new contracting firm which will make a specialty of concrete construction work of all kinds. The firm is composed of Rodman M. Brown and E. M. Read, both formerly connected with the J. S. Metcalf Co., of Chicago.

THE FISHER HYDRAULIC STONE & MACHINERY CO., Builders' Exchange Bldg., Baltimore, is understood to have taken a contract for a number of buildings to be erected in Cairo, Egypt, for the Desert Bungalows & Hotel Syndicate, of Egypt and London. In Egypt stone construction costs about $10 a cu. ft.

WM. B. SCAIFE & SONS CO., Pittsburg, Pa., has secured the contract from the Firth-Sterling Steel Co., of Pittsburg, for the construction and erection of the steel frame buildings required for the new ordnance plant at Washington. Several extensive buildings will be put up, involving a large tonnage of structural steel.

THE HEALEY SEWER MACHINE & CONSTRUCTION CO., Park Row Bldg., New York, and 15 Beacon St., Boston, has just completed 70,000 ft. of borings for the New York Rapid Transit R. R. Commission. This company also makes a specialty of sewer renovation and maintenance and concrete piling. Mr. E. Elbert Young is the Engineer and Manager.

THE NATIONAL HYDRAULIC STONE CO., Wilkins Ave., Baltimore, whose plant was recently destroyed by fire has proceeded to rebuild on a much larger scale. At the time of the fire the company had a number of contracts for blocks under way. The company has just closed a contract for a plant to be built in Cairo, Egypt, for an English syndicate. D. A. Leonard is Pres. and R. M. Howe, Mgr.

C. L. BERGER & SONS, Boston, invited their employees, some 75 in all, to meet on Feb. 3 at the Quincy House, Boston, the occasion being the third anniversary of the opening of the new plant at 39 William St. Besides the banquet there was given a very enjoyable entertainment. Before the company broke up each one of the employees was presented by the firm with a present in the shape of a gold coin.

THE ELLIS-FORD MFG. CO., Buhl Block, Detroit, Mich., announces that Ellis pipe cutters are used by water and gas companies in about 110 cities in the U. S. and Canada. The business of the company has grown so rapidly that more capital is required and subscriptions for stock are now being taken. D. L. Ellis, formerly City Engr., of Great Falls, Mont., is Pres.; J. J. Hurley is vice-Pres., and F. D. Ford is Secy and Treas.

THE ROBINS CONVEYING BELT CO., of New York, has recently secured an order from the Imperial Japanese Navy for a 12-in. belt conveyor for the arsenal at Tokio. Among other orders the Robins company now has on hand is one from the Solvay Process Co., Syracuse, for conveyors for its stone crushing plants, and one from its agents in South Africa, for a conveyor for use as tailing stacker in one of the large gold mines in the Rand.

THE ALMA CEMENT CO. has decided to close its executive and sales agency offices in the Land Title Bldg., Philadelphia, and remove same to Wellston, O. On and after Feb. 15th all communications should be addressed to the company at Wellston, Jackson county, O. Mr. James L. Bernard has resigned as sales manager of the Northampton Portland Cement Co., to assume the position of sales manager with the Alma Cement Co., with offices at Wellston, O.

THE H. W. JOHNS-MANVILLE CO., on account of increasing business has found it necessary to make additions to the sales force, and the recent establishment of two new departments at its head offices in New York. One of these is the railroad department, devoted to railway supplies, of which the company manufactures a large variety. Mr. J. E. Meek has been appointed manager of the new railroad department. In addition to this an export department has been organized under the management of Mr. Wm. Angevine in order to facilitate the handling of the foreign business of this company. They are building up a large business with the Spanish-American countries in particular.

THE LUNKENHEIMER CO., Cincinnati, recently placed an order through the Cincinnati office of the Allis-Chalmers Co. for a 425 KW., type A. I. generator unit. The Pittsburg Plate Glass Co., whose complete power and electrical equipment for the new plant at Crystal City, Mo., was purchased from the Allis-Chalmers Co., has recently ordered two additional generators for the same plant. The Watab Pulp & Paper Co., of Sauk Rapids, Minn., whose entire electrical equipment of alternators and motors is being furnished by the Allis-Chalmers Co., has ordered another 100 HP. motor for the same installation. The American Car & Foundry Co. has recently concluded the purchase of an addition to the present power plant at its Huntington, W. Va., works, from the Allis-Chalmers Co., of Milwaukee.

THE WESTINGHOUSE MACHINE CO., East Pittsburg, has received during the past two months orders for Westinghouse-Parsons steam turbines from the Transit Development Co., Brooklyn, for a 7,500-KW. turbine; Edison Electric Co., Los Angeles, for a 7,500-KW. turbine; the Laclede Power Co., St. Louis, for two 2,000-KW. turbines; the Chautauqua Traction Co., Jamestown, N. Y., for a 1,500-KW. turbine; the Mt. Whitney Power Co., Visalia, Cal., for a 1,000-KW. turbine; the North Shore Electric Ry., San Francisco, for a 1,000-KW. turbine, and the Winston-Salem Power Co., Winston-Salem, N. C., for a 750-KW. turbine. Other orders are from Beacon Mfg. Co., New Bedford, Mass.; Water, Light & Gas Co., Hutchinson, Kan.; Pressed Steel Car Co., Pittsburg, and the Solvay Process Co., Syracuse, for 500-KW. turbines, and from the B. & O. R. R. Co., Baltimore, and E. R. Ladew, Glen Cove, L. I., for 300-KW. turbines.

AN ENGINEERING AND MACHINERY EXHIBITION will be held in London, England, from Sept. 15 to Oct. 17, 1906, under the presidency of Sir Wm. H. White, K. C. B., LL. D., F. R. S., and a distinguished patronage, including the foremost English scientists; the past presidents, presidents and vice-presidents of all the engineering institutions, the consuls of foreign countries, etc. While this exhibition has been held annually for some time, it has been on a much smaller scale than is planned for this year's, and the quantity of American machinery that has been shown has steadily increased. Considering the rapid development of the American machinery industry in Great Britain in the past decade it seems that an exhibition of this kind is one that should be taken advantage of by manufacturers looking for European trade. Full details of the exhibition will be printed later. Those interested may address H. F., care Engineering News, N. Y.

THE B. F. STURTEVANT CO., of Boston, is installing heating and ventilating equipments in the following railroad shops: Atlantic Coast Line Ry. Co., South Rocky Mount Shops, N. C.; erecting shop with a contents of nearly 750,000 cu. ft.; Pennsylvania R. R. Co., Altoona, Pa., freight car paint shop, containing nearly 1,500,000 cu. ft.; Buffalo, Rochester & Pittsburg R. R., office building, Rochester; Pennsylvania R. R. Co., Trenton, boiler and tank shop, containing over 2,000,000 cu. ft. The Sturtevant system of roundhouse heating is to be installed at the 20-stall Edmonton roundhouse of the Canadian Northern R. R., Edmonton, Alberta, Can. Recent orders for generating sets have been placed with the St. Paul; U. S. Hotel, Easton, Pa.; Old Dominion Steamer "Hamilton;" Peter Hauck & Co., Harrison, N. J.; Alton Paving Bldg. & Firebrick Co., Alton, Ill.

THE NATIONAL AGRICULTURAL SOCIETY OF PARAGUAY will open an international exposition of agriculture and industrial implements and appliances at Asuncion on May 15. Space will be provided for the display of all machinery, tools and supplies used in agriculture and its allied industries. As the purpose of the exposition is to further the development of the country's natural resources by instructing the agriculturists in the use of the best modern implements, it is earnestly desired by the society that many U. S. manufacturers will be represented by exhibits of their goods, the personal attendance of salesmen, or the distribution of suitably prepared printed matter. Grand prizes of honor, and first, second and third class diplomas of honor will be awarded in all classes of exhibits, and competition will be open to the manufacturers of all nations. The National Agricultural Society has appointed as its representative for the U. S. the N. Y. "Commercial," 8 Spruce St., New York, from which all details can be obtained.

THE PABST BREWING CO., Milwaukee, has recently placed an order with the Allis-Chalmers Co. for additional steam and electrical units. There are three engines in all—one of the single cylinder, non-condensing type, cylinders 20 ins. × 36 ins., and two of the cross compound, non-condensing type, 18 ins. and 30 ins. × 36 ins., all vertical and of the heavy duty pattern for direct connection to electrical machines. The electrical equipment will consist of three revolving field type, alternating current generators, 25 cycles, one for 300 KW. and two for 400 KW. capacity; two exciter sets consisting of direct current, constant potential, compound wound generators, coupled direct to three phase synchronous motors and fitted with induction type of starting motors; and one exciter set consisting of a direct current generator of the same type as above for steam drive. A feature of the new installation will be in a special governing device consisting of an electrical adjusting or synchronizing attachment by which the speed of the engines may be varied within certain limits while they are in operation, the device being under control of the operator at the switchboard. It is expected that the first of the new units will be in operation by the first of May. Mr. C. A. Chapman, of Chicago, acted as Consulting Engineer for the Pabst Brewing Co.

THE B. F. STURTEVANT CO. are the largest manufacturers of blowing machinery in the world which grew out of the invention by a young shoemaker of Norridgewock, Me., of an ingenious machine for pegging shoes. This young man, B. F. Sturtevant by name, gave up his cobbler's trade and came to Boston in 1857 to introduce and manufacture his machine. A deep interest in all that pertained to the manufacture of shoes naturally led him to introduce various other labor-saving devices, among which was a buffing wheel for smoothing the soles. The dust created in the use of this machine proved an annoyance until he hit upon an arrangement of exhaust fan for drawing it away. The only purchasable fan of that day was an extremely crude and inefficient affair. With characteristic thoroughness he designed and built a new type of fan embodying many improvements. Its success in connection with buffing wheels led, naturally enough, to its trial for the removal of refuse from wood-working machinery, and thence to its employment for handling all classes of light material. Almost coincident was its application for blowing forge, boiler and cupola fires. Mr. Sturtevant established himself in a small way with half a dozen workmen at No. 72 Sudbury St., Boston, to carry on the business of making these machines, and from that small beginning the present mammoth enterprise has grown.

THE AUSTIN MANUFACTURING CO., of Chicago, reports that business is very good for this time of the year, and that the sales for the year 1905 exceeded by 50% those of previous years. Their plant at Harvey, Ill., is well stocked, and many orders are being booked for crushing machinery, contractors' outfits, well and road machinery. The following list of recent purchasers of crushing plants only covers about two weeks' sales (we publish it for the benefit of prospective buyers): U. S. Government, for Manila, P. I., No. 3 crushing plant; Chattanooga Blast Furnace Co., Chattanooga, Tenn., No. 7½ crushing plant; Rio de Janeiro Tramway, Light & Power Co., New York, N. Y., No. 5 crusher; Widell, Finley & Co., Mankato, Minn., Nos. 3 and 5 crushing plant; W. & J. Lempriere, Melbourne, Australia, No. 5 crusher; Hunkins-Willis Lime & Cement Co., St. Louis, Mo., No. 3 crushing plant; The U. S. Cement Co., Indianapolis, Ind., No. 6 crusher; Greenleaf Stone Co., Milwaukee, Wis., No 7½ crushing plant; Wm. McIntyre & Sons, Struthers, O., No. 3 crushing plant; O. K. Building & Construction Co., Oklahoma City, Okla., No. 8 crushing plant; Couch & Franklin, Charleston, W. Va., No. 5 crushing plant; J. M. Hamilton, Marion, O., No. 5 crushing plant; Phil Wilk, Rushville, Ind., No. 2 crushing plant; Gibraltar Quarry Co., Detroit, Mich., No 7½ crushing plant; W. J. Neale, Waco, Tex., No. 5 crushing plant; L. H. Stevens, Coffeyville, Kan., No. 5 crushing plant; Mike Elmore, Cherry Run, W. Va., No. 5 crushing plant.

TRADE PUBLICATIONS.

ELECTRIC HOISTING MACHINERY.—Crocker-Wheeler Co., Ampere, N. J. Bulletin No. 62. Paper; 7½ × 10 ins.; pp. 7; illustrated.

Electric hoists and winches as used in mines, ships, cranes, etc., are fully illustrated and described.

LOCOMOTIVE CRANE AND GRAB BUCKETS.—The Browning Engineering Co., Cleveland, O. Paper; 6 × 9 ins.; pp. 10; illustrated.

Two bulletins, Nos. 21 and 22, describe and illustrate the general type of locomotive crane with special reference to the grab buckets. These are designed to handle sand, ashes, coal, ore, etc., and do all necessary hauling of half a dozen loaded cars.

ELECTRIC BLUE-PRINTING MACHINES.—Buckeye Engine Co., Salem, O. Paper; 2½ × 6 ins.; pp. 24; illustrated.

This company manufactures blue-printing machines of a vertical cylindrical shape, using an easily regulated arc light for the printing. The prints are held in place on the outside of the glass cylinder by a curtain.

STEAM TRAP.—A. A. Griffing Iron Co., Jersey City, N. J. Paper; 5½ × 6¼ ins.; 4 cards; pp. 2; illustrated.

Diagrams of the Bundy Steam Traps are shown with the connections for feeding the boilers, getting rid of the water of condensation in the exhaust pipe between engine and condenser, and for utilizing condensation from low-pressure coils.

GRAPHITE LUBRICANTS.—Joseph Dixon Crucible Co., Jersey City, N. J. Paper; 9 × 12 ins.; pp. 8; illustrated.

This is a publication issued for the purpose of giving the public a better understanding of the different forms and respective uses of graphite.

GRAPHOIL LUBRICATORS.—Comstock Engine Co., 49-61 Clymer St., Brooklyn, N. Y. Paper; 3½ × 6½ ins.; pp. 12; illustrated.

Special oil-cups are so arranged that the oil is caused to flow over the graphite and take some of it in suspension. This does away with the objectionable settling of the graphite as often happens when the two are mixed.

PRESSED AND SEAMLESS DRAWN STEEL SPECIALTIES.—Janney, Steinmetz & Co., Philadelphia, Pa. Paper; 9 × 6 ins.; pp. 24; illustrated.

These specialties include steel tanks, tubes, shells, cylinders, reservoirs and a variety of other steel articles. Tables of sizes and capacities of tanks are given.

CONCRETE BUILDING BLOCKS.—Marquette Cement Mfg. Co., 1513 Marquette Building, Chicago. Paper; 5½ × 8½ ins.; pp. 4.

This is a circular of instructions for the manufacture of concrete building blocks, dealing specially with the proportions and methods of mixing the concrete and the proper curing of the blocks.

CONCRETE BLOCK MACHINES.—The Pettyjohn Co., 601 N. Sixth St., Terre Haute, Ind. Paper; 7 × 10 ins.; pp. 36; illustrated.

Building blocks, sills, caps, etc., are made with these machines. The machine is portable, the block being made in place in the yard and the machine removed, leaving the block to harden.

CONCRETE BRICK AND BLOCK MACHINERY.—Winget Concrete Machine Co., 482 N. High St., Columbus, O. Paper; 6 × 9 ins.; pp. 4; and circular, 28 × 21 ins.; illustrated.

The Winget and Columbus concrete block machines, Diamond cement brick machine and Columbus dry and wet mixer are shown; also various forms of blocks, and buildings constructed of these blocks.

CONCRETE BUILDING BLOCKS.—Perfection Block Machine Co., Kasota Building, Minneapolis, Minn. Paper; 6¼ × 9½ ins.; pp. 8; illustrated.

The Perfection blocks are hollow, and are made under heavy pressure in the machine instead of tamping. They have been used for the car shops of the Twin City Electric Ry.

CONCRETE BLOCK MACHINERY.—The Crescent Mfg. Co., Deshler, O. Paper; folder, 9½ × 6 ins.; illustrated.

The Crescent machine and building block are described. The block has the two faces connected by a web of smaller dimensions, so that the blocks are not hollow but form hollow spaces when built into a wall.

INDUSTRIAL CARS.—Chase Foundry & Mfg. Co., Columbus, O. Paper; 6½ × 5 ins.; pp. 20; illustrated.

Dryer cars, rack cars and transfer cars are shown, some of the last named having turntables mounted upon them. Roller bearings are used for the axles. Prices are given in all cases.

CONCRETE BLOCKS AND BLOCK MACHINES.—Coltrin Mfg. Co., Jackson, Mich. Paper; 7 × 5 ins.; pp. 54; illustrated.

The blocks are rectangular and hollow, of various designs, and the pamphlet consists largely of views of buildings constructed with the blocks. The machines include the Coltrin concrete-block and the Boos cement-brick machine.

PORTLAND CEMENT.—Lehigh Portland Cement Co., Allentown, Pa. Paper; 9 × 6 ins.; pp. 68; illustrated.

The greater part of this pamphlet is devoted to views of various engineering and architectural works in which the Lehigh cement has been used, with testimonials from users. Records of the strength of the cement and views of the company's works are also given.

CONCRETE BUILDING BLOCKS.—National Building Block Machinery Co., Milwaukee, Wis. Paper; 10 × 6½ ins.; pp. 33; illustrated.

The regular blocks are of L or T shape, on the two-piece system; long blocks for lintels and caps are also shown, together with special blocks. A number of buildings constructed of these blocks are illustrated.

COAL, DUMP AND INDUSTRIAL CARS.—Cleveland Car Co., West Park, O. Paper; 9 × 6 ins.; pp. 72; illustrated.

These cars are of steel and have ball-bearing journals. Dryer cars for bricks and concrete blocks, transfer cars and turntables; coal and mine cars, tilting and drop-bottom dump cars, foundry ladles, and portable tracks are among the specialties included. There is also a cable traction system, with winding engine and dump cars.

RAIL BONDS.—John A. Roebling's Sons Co., Trenton, N. J. Paper; 9¼ × 6 ins.; pp. 24; illustrated.

This is a soldered bond which can be attached to the web, the head or the base of the rail. It is made up of a flat copper strip, machine wound and formed. The distinct feature of this bond is a depression or pocket on the inside face of the bond for the purpose of holding a sufficient quantity of solder to make a solid connection.

INDUSTRIAL RAILWAY SUPPLIES.—The Ernst Wiener Co., 66-68 Broad St., New York City. 8 × 11 ins.; pp. 45.

This company, with works at Youngstown, O., makes a specialty of all classes of supplies for industrial railways, and offers a variety of designs of cars for special purposes and for use in various industries. It is of interest to note that a gage of 24 ins. is recommended for industrial railways, and it is stated that 90% of such roads are built of that gage.

CONCRETE BLOCK MACHINERY.—Century Cement Machine Co., 181 W. Main St., Rochester, N. Y. Paper; 8 × 10 ins.; pp. 68; illustrated.

The Hercules block making is described and various samples of its product are illustrated, as well as buildings in which the blocks have been used. Columns, capitals and other decorative architectural features can be made. There is also the Century machine for building combined curb and gutter in place. A price list of tools for cement work is given.

AUTOMATIC COLLAPSIBLE TAPS AND ADJUSTABLE REAMERS.—P. J. Kelley, 514 Meadow St., Elizabeth, N. J. Paper; 6 × 10 ins.; pp. 2; illustrated.

The chasers of this tool are on the outside of the body and have a bearing the entire length. The gage may be adjusted so that the teeth are caused to turn into the body of the tap when it has reached the desired depth, thus allowing it to be withdrawn, without backing up. The tap is preceded by a reamer, which is fitted into the body of the tap.

CEMENT BRICK MACHINE AND CONCRETE MIXER.—South Bend Machine Mfg. Co., 1802 So. Franklin St., South Bend, Ind. Paper; 3½ × 6½ ins.; pp. 16; illustrated.

The Standard brick machines are for hand operation. The mixer has a horizontal drum, mounted on trunnions, for tilting.

CONCRETE BUILDING BLOCKS.—The Standard Stone Co. of America, 1 Madison Ave., New York, N. Y. Paper; 10 × 7 ins.; pp. 36; illustrated.

Hollow blocks, flat veneer blocks, tile, pipe and all kinds of ornamental work are made by this process, under the McClenahan patents.

CONCRETE WATERPROOFING AND COLORING MATERIAL.—Cement Machinery Co., Burlington, Ia. Paper; 3½ × 5½ ins.; pp. 6; illustrated.

The material is applied as a solution applied to the finished concrete blocks, and is said to be fireproof as well as waterproof. Various colors can be made.

CONCRETE BUILDING BLOCKS. — Indestructible Post Co., First National Bank Building, Chicago. Paper; 5½ × 7 ins.; pp. 4; illustrated.

The Illinois block machine here described makes hollow blocks, and the block is not removed from the mold until it is placed where it is to remain while hardening.

CONCRETE MIXER.—The Knickerbocker Co., Liberty St., Jackson, Mich. Paper; 3½ × 6 ins.; pp. 6; illustrated.

The Coltrin concrete mixer has a horizontal tapering drum or shell, within which is a revolving frame with longitudinal spiral blades. The materials are fed to a hopper above the small end of the shell.

CONCRETE BLOCK MACHINES.—Anchor Concrete Stone Co., Rock Rapids, Ia. Paper; 3 × 6 ins.; pp. 16; illustrated.

The ordinary blocks have a front and back slab connected by iron dowels, so as to make the air space in a well continuous both horizontally and vertically.

CEMENT BLOCK MACHINERY.—Barker & Nighswander, Jefferson Ave. and Water St., Toledo, O. Paper; 6 × 9 ins.; pp. 16; illustrated.

The machines are claimed to be unique in that the blocks are tamped on the face and by the machine without hand tamping. Hollow, veneer and special blocks are made.

CONCRETE MIXERS.—The Jaeger Automatic Machine Co., Columbus, O. Paper; 6 × 9 ins.; pp. 12; illustrated.

The "Positive" machine has a horizontal cylindrical drum, with a central shaft carrying radial blades connected by longitudinal spiral blades. As these latter blades almost touch the shell the mixture cannot collect or clog inside.

CEMENT BRICK MACHINE.—T. M. Lettew & Son, Warsaw, Ind. Circular; 9½ × 12 ins.; illustrated.

This is a hand operated machine for making plain and ornamental cement building bricks.

CEMENT BRICK MACHINE.—Wm. Porten Co., St. Paul, Minn. Paper; 9 × 8½ ins.; pp. 8; illustrated.

The Porten cement-brick machine is illustrated and described, with estimates of cost of making brick. Views are given of the Minneapolis armory, which has walls of this material.

CEMENT BRICK MACHINE.—Reading Brick Machinery Co., Reading, Pa. Paper; 7 × 9 ins.; pp. 4; illustrated.

This machine is for sand-cement or sand-lime bricks, and the pamphlet illustrates the various patterns that can be produced.

PNEUMATIC APPLIANCES.—Chicago Pneumatic Tool Co., Fisher Building, Chicago. Paper; 6 × 9 ins.; pp. 24; illustrated.

This pamphlet relates especially to tampers and rammers for foundry and concrete block work. Sand sifters, riveting and chipping hammers, drills, etc., are also listed.

COLLAPSIBLE CENTERING.—Blaw's Collapsible Steel Centering Co., 1414 Penn Ave., Pittsburg, Pa. Paper; 5¼ × 7½ ins.; pp. 8; illustrated.

This is a sheet steel centering with interior braces, and is adapted for concrete sewers or conduits of different sizes and sections.

NUT LOCK.—Climax Stock Guard Co., 503 Title and Trust Building, Chicago, Ill. Paper; 6 × 3½ ins.; pp. 4; illustrated.

The lock plate for rail joints is a single plate with square or hexagon holes to fit over the nuts. This is slipped upon the nuts after they have been screwed up, and held in place by two yokes.

WATERPROOFING.—E. J. Winslow Co., Chicago. Paper; 7¾ × 10 ins.; pp. 20; illustrated.

The specialty is a waterproof hydrolithic coating and basement construction, which has been successfully employed in a number of new buildings and to remedy damp and wet conditions of basements that were not made waterproof originally. It has also been used in the New York subway and the Interborough Ry. power house. A long list of references is given, and illustrations from photographs of basements, etc., before and after treatment.

RAILWAY SIGNAL BATTERY VAULTS.—E. J. Winslow Co., 138 Jackson Boulevard, Chicago. Paper; 9 × 6 ins.; pp. 17; illustrated.

These vaults are of hydrolithic waterproof concrete, reinforced with steel. They are in the form of cylindrical chambers, ready to be shipped complete and set in place. Inside are the trays for the batteries. Different forms of these vaults are shown.

PORTLAND CEMENT.—Sandusky Portland Cement Co., Sandusky and Cleveland, O. Paper; 10¾ × 7¾ ins.; pp. 116; illustrated.

This handsome and elaborate publication describes the manufacture, strength and other features of Medusa cement, and consists largely of excellent half-tone engravings of a great variety of engineering and architectural structures in which this cement has been used. Records of tests of the cement and notes on the various uses of cement are also given, together with numerous testimonials.

CONCRETE BUILDING BLOCKS.—The Hayden Automatic Block Machine Co., 112 W. Broad St., Columbus, O. Paper; 5 × 6¾ ins.; pp. 63; illustrated.

This pamphlet describes the various forms of plain and ornamental blocks, together with the company's block making and concrete mixing machines. Information is given as to the proportions, manufacture, coloring, etc., of the concrete, and a number of views are given of buildings in which the Hayden blocks are used. Other specialties listed are stone crushers and cars for handling blocks, for use at block making plants.

CENTRIFUGAL PUMPS.—The Dayton Hydraulic Machinery Co., Dayton, O. Paper; 6 × 9 ins.; four bulletins; pp. 4, 8, 12 and 16; illustrated.

Three of these bulletins relate to the Brooks centrifugal pump, in which a hollow rotating piston takes the place of the usual runner and is claimed to give much higher efficiency. The construction and action of the pumps are described, and there are tables of sizes and capacities, together with some testimonials. The fourth bulletin describes the Skinner system of irrigation for orchards, gardens or greenhouses; water is forced by the Brooks centrifugal pump through a system of overhead pipes having discharge nozzles at intervals so as to distribute the water as a rain or spray.

CRANES, CONVEYORS, COAL-HANDLING PLANT AND STRUCTURAL WORK.—Interstate Engineering Co., Cleveland, O., and Chicago, Ill. Paper; 9 × 6 ins.; pp. 72; illustrated.

A variety of designs of locomotive, wrecking, gantry, cantilever and small cranes are illustrated; also coal-handling plants and locomotive coaling stations, railway pile drivers, concrete mixers, coal tipples, etc. The structural work includes office and factory buildings, bridges, etc. The pamphlet consists mainly of half-tone engravings representing the company's machinery and work.

THE WALSCHAERT VALVE GEAR.—American Locomotive Co., New York, N. Y. Paper; 9 × 6 ins.; pp. 44; illustrated.

This valve gear for locomotives was patented by Egide Walschaert in Belgium in 1844, and has been very extensively used by railways on the European continent. Its first application in American practice was on the great Mallet duplex engine built in 1904 for the Baltimore & Ohio Ry., but since then it has been applied to a number of passenger and freight engines of different railways. Several of these are illustrated by half-tone and line engravings. There are also drawings of the valve gear, and particulars of its construction and operation.

For other Proposal Advertisements see pages 43, 44, 45, 46, 47, 48, of Advertisements and Construction News page 56.

U. S. ENGINEER OFFICE, Galveston, Tex., Jan. 24, 1906.—Sealed proposals, in triplicate, for dredging in Buffalo Bayou, Tex., will be received here until 11 A. M., Feb. 23, 1906, and then publicly opened. Information furnished on application. EDGAR JADWIN, Capt., Engrs. 4-4t

U. S. ENGINEER OFFICE, Federal Building, Dallas, Tex., Jan. 19, 1906.—Sealed proposals for constructing complete wooden snagboat will be received here until 12 M., Feb. 19, 1906, and then publicly opened. Information on application. W. P. WOOTEN, Capt., Engrs. 3-4t

VISITING CUBA

(for second time)

The advertiser would be glad to take up on commission the placing of any business that would not require too much of his time. "E. H. F.," care Engineering News, New York. 6-3t

STREET LIGHTING.

Sealed proposals, to be ... undersigned, will be received ... of the Common Council of ... to be held at the Council ... Engine House, No. 18 ... ange, New Jersey, on Monday ... 5, 1906, at eight o'clock ... streets, avenues, public ... buildings of said city ... terms of three and five years ... ber 1, 1906. Lamps for ... the most improved pattern ... state price per lamp per ... of three hundred or more ... lights must be of at least ... candle power, and must ... every night in the year from ... after sunset to within ... before sunrise, and all ... to be used in public buildings ... least sixteen candle power ... state charge for same per kilowatt hour. The successful bidder to sign a contract and bond to be approved by the Common Council of said city, and each bidder to accompany his bid a certified check or bond for five thousand dollars, to the City of Orange, as security for the faithful performance of the contract, in accordance with its terms.

The Street Lighting Committee reserves the right to reject any or all bids.

EDWARD CHEETHAM,
Chairman Committee on Street Lighting.
Orange Common Council.
WILLETT B. GANO, City Clerk. 6-2
Orange, N. J., February 2, 1906.

MACADAM ROAD.

Peekskill, N. Y.

Sealed proposals for the construction of 2.18 miles of Telford and Macadam Road in the Town of Cortlandt, near Peekskill, N. Y., will be received until noon on the 15th day of March, 1906, at the Town Clerk's office of said Town, Municipal Building, Main Street, Peekskill, N. Y.

Plans, drawings and specifications may be seen at the said Town Clerk's office until that time.

By order of the Town Board.
S. ALLEN MEAD, Town Clerk.
Feb. 3, 1906. 6-1t

PROPOSALS FOR CONSTRUCTION.—Office Constructing Quartermaster, Fort Assiniboine, Montana, January 18, 1906.—Sealed proposals, in triplicate, will be received here until 11.00 A. M., Mountain time, February 19, 1906, and then opened, for construction of a Bacterial Sewage Purification Plant, Plan Spl. 2-707, at Fort Assiniboine, Montana, in accordance with plans and specifications to be seen at this office, also at office of Chief Quartermaster, Department of Dakota, St. Paul, Minn., at office of Chief Quartermaster, Department of the Lakes, Chicago, Illinois, at office of Depot Quartermaster, Army Building, New York City, and at office of Depot Quartermaster, St. Louis, Missouri, where instructions to bidders and blank form of proposals can be procured. All proposals previously received have been rejected. Work to begin when frost is out of ground in the spring of 1906. Bidders are informed that they must submit proposals complete in every detail for doing this work, and must state the time they will commence and complete the work. A guarantee in the amount of 10 per cent. of amount of bid will be required. Unguaranteed bids will not be considered. The Government reserves the right to reject or accept any or all bids, or any part thereof. Envelopes to be indorsed, "Proposals for construction of a Sewage Purification Plant," and addressed to CAPTAIN J. B. McDONALD, Constructing Quartermaster. 4-4t

Municipal Civil Service Commission,
61 Elm Street,
February 3, 1906.

PUBLIC NOTICE IS HEREBY GIVEN that an open competitive examination for the position of MECHANICAL DRAFTSMEN WILL BE HELD ON TUESDAY, FEBRUARY 27, 1906, at 10 A. M. The receipt of applications will close on Saturday, February 17th at 12 M. For scope of examination and further information, apply to the Secretary of the Commission.

WILLIAM F. BAKER, President.
R. ROSS APPLETON,
ALFRED J. TALEY,
Civil Service Commissioners.
FRANK A. SPENCER,
Secretary. 6-2t

PROPOSALS FOR TWO SNAGBOATS.—U. S. Engineer Office, Vicksburg, Miss., Jan. 8, 1906.—Sealed proposals, in triplicate, for construction and delivery of two steel snagboats will be received here until 12 noon, standard time, March 10, 1906, and then publicly opened. Information furnished on application. G. M. HOFFMAN, Capt., Engrs. 2-2t 5-2t

SITUATIONS OPEN

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